

**REMI**

**Technology  
meets Simplicity**



**REMI**

**Laboratory Instruments**

**REMI GROUP**, established in 1960 by the late visionary Mr. C. K. Saraf along with his son Mr. V. C. Saraf (present Chairman), has diversified into multi-product manufacturing divisions to become one of India's most trusted brands. Each division of **REMI GROUP** has its headquarters in Mumbai & is involved in Manufacturing, Marketing & Distribution throughout India with more than 14 branches through its network of over 950 dealers & exports to more than 50 countries around the globe. **REMI** is synonymous with reliability & fair business practices.

**REMI Instruments and Healthcare Division** is a pioneer in manufacturing Laboratory /Magnetic Stirrers and Centrifuges, Blood bank refrigerators /freezers meeting more than 50% of Indian demand. Our best in technologies products made with our manufacturing experience of over 50 years ensure that **REMI** instruments are user friendly and always available close to you. This has enabled us to sell more than a million units till date. Our success is an outcome of our unwavering focus on our **core values-Quality, Integrity, Reach & Customer Focus**

Placing a strong emphasis on delivering hi-tech quality products that are simple to operate, durable, safe and reliable, we have established Quality Management Systems in place. All products manufactured by us are made to comply with national/international standards as per customer requirements.

**REMI** is committed to be in touch with the latest technology to offer innovative products and upgrade existing products based on customer feedback. Efficient delivery schedules, cost-effective prices and exceptional after sales service has made **REMI** a trusted name in the industry

With technology as its backbone, **REMI** is continuously evolving and is in the process of upgrading existing products based on customers' feedback as well as introducing products that set the benchmark for quality.



## From the Chairman's Desk

REMI is synonymous with reliability. With over half a century of serving scientific and healthcare professionals, REMI, today is a globally well-known and trusted brand with a pan India distribution network of more than 950 dealers. Our branches across India combined with our distribution network ensure that REMI products are available immediately at a location close to you. REMI today is considered a pioneer in laboratory & healthcare instruments sector due to its expertise in adopting technology to offer performance oriented quality products at affordable price points.

For all this achievements and awards, I wish to recognize and thank all our stakeholders for continuously supporting REMI in its various endeavors. I also wish to heartily thank our customers for their feedback, which is always our greatest source of learning and improving our products. Special thanks to our dedicated dealers for the continued commitment and synergies as we expand the boundaries with modern technology that simplifies the work of our customers.

Our commitment towards providing technically sound products and exceptional after sales service remains strong. Let me reiterate our promise once again to keep the momentum going, to cross milestone after milestone in pursuit of being the partner of choice to our customer. Let us deliver world-class quality products to make life simple and beautiful

It is with great pride & immense pleasure that I present our new catalogue to you. The catalogue explains in detail the new products that we are introducing now along with the upgradation in existing product lines done by us. I invite you to go through the catalogue and see which products best fit your organization.

**V. C. Saraf**  
Chairman

## Products

## Page

Laboratory Stirrers	04 - 09
Impellers / Magnetic Stirrer (MS-800 Plus)	10 - 10
Magnetic Stirrers 	11 - 13
Multi Vortexer / Cyclo Mixer	14 - 14
Water Bath / Water Bath Shakers	15 - 15
NEYA Centrifuges	16 - 23
Medico Plus	24 - 24
Medico / Doctor Centrifuges / Mini Centrifuge	25 - 25
Micro Centrifuge	26 - 26
Laboratory Centrifuges (R-4C)	27 - 27
Gerber Centrifuge	28 - 28
Laboratory / Micro Centrifuges (R-8C, RM-12C, R-8C BL)	29 - 30
Laboratory Centrifuges (R-8C Plus, R-8M Plus, R-12C Plus)	31 - 35
Research Centrifuges	36 - 37
Compact Cooling Centrifuges / Cooling Micro Centrifuges	38 - 40
Refrigerated Centrifuges	41 - 44
Heavy Duty Centrifuges	45 - 45
Microplate Shaker / Tube Roller Mixer	46 - 46
Mini Rotary Shakers / Rotary Shakers 	47 - 48
Bench Top Orbital Shaking Incubator	49 - 50
Dry Hot Air Oven	51 - 51
Heating Incubators	52 - 52
Vacuum Oven 	53 - 53
Orbital Shaking Incubators	54 - 55
Cooling Incubators	56 - 58
Laboratory Refrigerator	59 - 59
Cold Cabinets	60 - 61
Humidity Chambers	62 - 63
Stability Chambers	64 - 65
Deep Freezer / Quick Freezer	66 - 66
Refrigerator Cum Freezer	67 - 67
Deep Freezers	68 - 69
Ultra Low Deep Freezers (-86°C) 	70 - 73
Walk-in Chambers	74 - 77
CO <sub>2</sub> Incubator 	78 - 78
Blood Banking Equipments / Critical Care & Patient Support Equipments	79 - 79

**ZERO  
COMPROMISE MODELS**

- BRUSHLESS
- ECONOMICAL



RQ-5 Plus

RQ-100 Plus

### Laboratory Stirrers

REMI presents the next generation of laboratory stirrers for stirring / mixing etc of chemical, pharmaceutical, food and cosmetic products. The equipment basically consists of body, Chuck, stainless steel blade propeller and a U-type stand.

#### Salient Features :

- High torque even at low speeds
- Monitoring of set & actual speed
- Wide range of impellers
- Advanced Stirrers with microprocessor technology
- Advanced Stirring speed control through VFD
- Constant speed even with change of load / Voltage
- Easy -to- read display of set & actual parameters
- Last parameter recall. Ideal for repetitive processes
- Accepts shafts up to 13mm Ø
- Motor protection in case of continuous overload
- Stopper for protection of vessel & shaft
- Special base design for topple free operation

#### Technical Data

Features	RQ-5 Plus	RQ-100 Plus
Max. stirring capacity (Water) (Liters)	5	100
Motor Type	BLDC	AC Induction, 3 phase
Motor rating	10 watt	100 watt
Speed range [rpm]	50-1500	100-4000
Speed display	LED	LED
Timer	0 to 99 Minutes	0 to 99 Minutes
Motor Overload protection	LED light flash, auto stop	LED light flash, auto stop
Chuck Ø (mm)	1.5 to 10	1.5 to 13
Stirring Shaft Ø x length (mm)	6 x 380 mm	12 x 500
Impeller Type / Ø (mm)	Axial Turbine / 36	Pitched x 2 / 65
Dimensions [Wx D x H] (mm)	80 x 180 x 370	320 x 285 x 620
Stand length (mm)	500	1220
Weight [kg]	6.5	19
Power [W]	10 watt	175 watt

Supply: 220-240 Volts, 50 Hz, Single Phase.



RQ-20 Plus

### Laboratory Stirrers

REMI presents the next generation of laboratory stirrers for stirring / mixing etc. of chemical, pharmaceutical, food and cosmetic products. The equipment basically consists of body, chuck, stainless steel blade propeller and stand.

### Salient Features :

- 2 models - 40 liters & 20 liters capacity
- Advanced Stirrers with microprocessor technology
- Speed range 50 - 2200 rpm
- Monitoring of set & actual speed
- Constant speed even with change of load / Voltage
- High torque even at low speeds
- Accurate stirring speed control
- Maintenance free Brushless DC motor ensures high torque
- Easy-to-read backlit LCD for display of set & actual parameters
- Display of torque / speed
- Last parameter recall, ideal for repetitive processes
- Motor protection in case of continuous overload
- Accepts shafts up to 13mm Ø
- Protection class acc. to DIN/EN 60529
- Stopper for protection of vessel & shaft
- Special base design for topple free operation

Technical Data		
Features	RQ-40 Plus	RQ-20 Plus
Max. stirring capacity (Water) (Liters)	40	20
Motor rating input [W]	120	60
Motor rating output [W]	100	50
Speed range [rpm]	50-2200	50-2200
Speed display	LCD	LCD
Max. torque [Ncm]	60	40
Torque display	LCD	LCD
Motor Overload protection	LED light flash, auto stop	LED light flash, auto stop
Chuck Ø [mm]	13	13
Stirring Shaft Ø x length (mm)	8 x 220	8 x 220
Impeller Type / Ø [mm]	4 Cross Blade / 50	4 Cross Blade / 50
Dimensions [Wx D x H] (mm)	83 x 186 x 220	83 x 186 x 220
Stand length (mm)	750	750
Weight [kg]	2.4	2.4
Power [W]	130	70
Protection class acc. to DIN/EN 60529	IP 42	IP 42

Supply: 220-240 Volts, 50 Hz Single Phase.



RQ - 121 / D



RQT - 124 A / D



RQ - 129 / D

### Direct Drive Stirrers

#### AC / DC Lab Stirrers

They are designed to meet requirements of laboratories demanding wide flexibility of stirring operations. These stirrers are available in various models. The choice of model will be dependant on the batch size / volume to be stirred.

#### Salient features :

- Multipurpose stirrers for general purpose & PUF stirring
- Heavy duty stirrers for pilot plant, bench scale process & small batch production
- Models also available with digital speed indicator for speed indication & process validation

### PMDC Lab Stirrers

Permanent Magnet DC (PMDC) Stirrers are specially designed for routine laboratory work, research and development, QA analysis and sample preparations. Stirrers have uniform speed control with digital RPM indicator which gives speed read outs, valuable for applications where process validation and reproducibility is required.

RQ - 121 / D, RQ - 126 / D and RQ - 129 / D models use direct drive motors & are ideal for day to day laboratory use with aqueous & low viscosity liquids such as light oils.

#### Salient Features :

- PMDC motor for powerful stirring
- Reliable performance even in continuous use
- Stepless electronic speed regulator with digital display
- Hollow shaft in Geared models permitting height adjustment
- Chuck for easy interchangeability of shaft
- Stirring shaft SS 316; Retort Rods SS 304



RQG - 129 / D



RQ - 128 / D

### Geared Stirrers

The Geared Stirrers are specially designed for a broad spectrum of applications requiring low speed & high torque for stirring of viscous fluids & materials. These stirrers are used in routine laboratory work, research and development, QA analysis and sample preparations.

The user has choice of different types of drives i.e. AC / DC, PMDC or AC with stepless speed regulations for continuous variation of speed as per requirements.

### PMDC Geared Stirrers

These stirrers have PMDC motors with hollow shafts in output spindle (except RQG-121/D), permitting length adjustment with ability to mix high viscosity liquids such as heavy oils, lubricants & paints. It has uniform speed control with digital RPM indicator which gives speed read outs, valuable for applications where process validation and reproducibility is required.

- PMDC motor for powerful stirring
- Reliable performance even in continuous use
- Hollow shaft in Geared models permitting height adjustment
- Stirring shaft SS 316; Retort Rods SS304

### AC Geared Stirrers

- Specially designed AC geared stirrers for continuous mixing in viscous materials and solvents that change viscosity during mixing. Heavy duty brushless motor produces no spark.

### Salient Features :

- Stirring shaft length-adjustable in hollow output spindle
- Stirring shaft SS 316 & Retort Rods SS 304

### AC / DC Universal Geared Stirrers

- These Geared stirrers have Universal AC / DC motor, for routine mixing application in laboratories.



RQ - 140 / D



RQ - 140 / DE



RQ-127 A/D

### AC Stirrers

These Stirrers are specially designed brushless AC variable speed stirrers driven by frequency inverter to ensure reproducible speed with any load.

**Model RQ - 140 / D - FP is available with flame proof motor & frequency inverter inside flameproof enclosure.**

These stirrers have steady & constant speed for viscous materials and solutions that change viscosity during mixing. They have built in digital RPM indicator for process validation and reproducibility.

### Salient Features :

- Facility for setting of stirring speed in increments of 10 RPM
- Digital display of stirring speed within the range of 10% to 100% (+100 RPM)
- Stirring shaft SS 316, Retort Rods SS 304

### Homogenisers & Emulsifiers

These are designed for homogenization, emulsification, dispersion and mixing of fluids at high speed. The user has a choice of selecting from AC Drive or AC / DC Drive with stepless speed regulations for continuous variation of speed as per requirements.

**RQ - 127 A / D** suitable for homogenizing of tissues at high speed available. Chuck to hold shaft upto 10 mm dia. fitted with PTFE grinding pestle (50ml). Glass homogenising cup with rod supplied as standard, optional available 5 ml, 15 ml, 25 ml & 100 ml.

**RQ - 127 / D, RQ - 130 / D, RQ - 130B / D** are with AC / DC motor, these units are with Saw cutter impeller housed in flange type cage. **Optional digital speed indicator available for precise setting of speed.**

**RQ - 140 / DE** specially designed brushless AC variable speed Emulsifier driven by frequency inverter to ensure reproducible speed with any load. Steady & constant speed ideal for solutions that change viscosity during mixing. Emulsifier has built in digital RPM indicator for process validation and reproducibility.

Model	Stirring Shaft		Impeller		Motor	Speed (rpm)		Stirring capacity		Digital Speed Indicator
	Length (mm)	Ø (mm)	Type	Ø (mm)		Min	Max	Type of fluid	Max. Volume	
<b>Direct Drive Stirrers</b>										
RQ-121/D	250	8	Axial Turbine	36	PMDC	200	2000	Water/Light Oil	10 Ltrs.	✓
RQ-126/D	450	10	Pitched Fan	75	PMDC	120	2000	Water/Light Oil	25 Ltrs.	✓
RQ-129/D	550	10	Pitched Fan	100	PMDC	100	1400	Water/Light Oil	50 Ltrs.	✓
RQM-122/R	250	6	Pitched Fan	38	AC/DC 1/20 HP	800	4000	Water	7 Ltrs.	✗
RQ-122/D	250	6	Pitched Fan	38	AC/DC 1/20 HP	800	4000	Water	7 Ltrs.	✗
RQ-124A/D	350	8	Pitched Fan	52	AC/DC 1/8 HP	300	4000	Water	20 Ltrs.	✗
RQT-124A/D	350	8	Pitched Fan	52	AC/DC 1/8 HP	300	4000	Water	20 Ltrs.	✓
RQ-134S/D	450	12	Pitched Fan x 2	55	AC/DC 1/4 HP	900	5000	Water	35 Ltrs.	✗
RQ-134L/D	450	12	Pitched Fan x 2	65	AC/DC 1/2 HP	900	6000	Water	60 Ltrs.	✗
RQ-134H/D	450	12	Pitched Fan x 2	75	AC/DC 2/3 HP	500	5000	Water	80 Ltrs.	✗
RQT-134H/D	450	12	Pitched Fan x 2	75	AC/DC 2/3 HP	500	5000	Water	80 Ltrs.	✓
<b>Geared Stirrers</b>										
RQG-121/D	250	6	Axial Turbine	36	PMDC	50	550	Light Oil	5 Ltrs.	✓
RQG-126/D	450	8	4 Cross Blade	75	PMDC	50	750	Paint/Gear Oil	15 Ltrs.	✓
RQG-129/D	550	10	4 Cross Blade	100	PMDC	50	550	Paint/Gear Oil	25 Ltrs.	✓
RQ-128/D	310	8	4 Cross Blade	90	AC/DC 1/20 HP	50	150	Light Oil	3 Kgs.	✗
RQ-128B/D	310	8	4 Cross Blade	90	AC/DC 1/8 HP	50	150	Light Oil	7 Kgs.	✗
RQ-128D/D	450	12	4 Cross Blade x 2	120	AC/DC 1/2 HP	50	280	Light Oil	20 Kgs.	✗
RQG-128A/D	450	8	4 Cross Blade	75	AC Brushless	50	550	Water	10 Ltrs.	✗
RQG-128C/D	450	10	4 Cross Blade	90	AC Brushless	50	500	Paint/Gear Oil	20 Ltrs.	✗
<b>AC Stirrers / Flameproof Stirrers</b>										
RQ-140/D	730	10	4 Cross Blade	100	AC Brushless	100	1400	Water/Light Oil	40 Ltrs.	✓
RQ-140/DFP	550	10	4 Cross Blade	100	Flame Proof	100	1400	Water/Light Oil	40 Ltrs.	✓
<b>Homogenisers / Emulsifiers</b>										
RQ-127/D	250	8	Saw Cutter	30	AC/DC 1/8 HP	300	6000	Water	8 Ltrs.	✗
RQT-127/D	250	8	Saw Cutter	30	AC/DC 1/8 HP	300	6000	Water	8 Ltrs.	✓
RQ-127A/D	275	8	Teflon Pestle		AC/DC 1/8 HP	300	8000	upto 100ml		✗
RQT-127A/D	275	8	Teflon Pestle		AC/DC 1/8 HP	300	8000	upto 100ml		✓
RQ-130/D	480	12	Saw Cutter	40	AC/DC 1/4 HP	300	5000	Water	20 Ltrs.	✗
RQT-130/D	480	12	Saw Cutter	40	AC/DC 1/4 HP	300	5000	Water	20 Ltrs.	✓
RQ-130B/D	480	12	Saw Cutter	60	AC/DC 2/3 HP	300	5000	Water	35 Ltrs.	✗
RQT-130B/D	480	12	Saw Cutter	60	AC/DC 2/3 HP	300	5000	Water	35 Ltrs.	✓
RQ-140/DE	480	12	Saw Cutter	40	AC Brushless	500	5000	Water	35 Ltrs.	✓

Supply: 220-240 Volts, 50 Hz Single Phase.

**Axial Turbine**

Axial flow from top to bottom for stirring in round vessels

**Pitched Fan**

Radial flow from top to bottom for medium to high speed. For aerating of low viscosity media

**Saw Cutter**

Radial flow from top to bottom for medium to high speed with high shearing force

**4 Cross Blade**

Axial flow from top to bottom for medium to high speed

**Teflon Pestle**

For homogeniser

## Magnetic Stirrer

**MS 800 Plus**

Ultra - flat compact magnetic stirrer, guaranteed with modern magnet coil technology. Wear - free with no moving parts. To ensure better mixing, the lab disc can reverse direction of rotation automatically every 30 seconds

- No moving parts - truly maintenance free
- Low aspect ratio (just 12 mm thick)
- Software driven gradual acceleration
- Adjustable speed (15 to 1500 RPM) with digital display
- Microprocessor controlled with last run memory feature
- Stirring cap. 800 ml - set up place of 100 mm Pulse mode - reverses the direction every 30 secs for proper mixing
- Universal power supply - small wall mount adaptor
- IP 65 compliant design (Water spill resistant)

- Corrosion resistant SS top surface to fight harsh chemicals
- Recommended Stir bar length 25 mm
- Supplied with 1 (one) high strength stir bar

Technical Data	
Specifications	MS-800 Plus
Max RPM	1500 RPM
Speed Setting	15 to 1500 RPM (at every 50 RPM)
Set - up plate material	Stainless Steel
Speed indicator	Yes
Permissible ambient temperature [°C]	5 - 40
Permissible relative humidity [%]	80
Load capacity (Water)	800 ml
Recommended Stir bar length	25 mm
Pulse function	Yes
Sync Mode	No
Last run memory	Yes
Dimensions (W X D X H)	120 x 164 x 12 mm
Weight	400 gm
Protection Class	IP 65 compliant design (Water spill resistant)

Supply: 220-240 Volts, 50 Hz Single Phase.



1-MLH



1-ML



1-RML

### Magnetic Stirrers

“ML” series of Magnetic Stirrers with stainless steel top housing are most compact models. Permanent Magnet DC (PMDC) motor gives high torque even at lower speeds and maintains speed stability despite viscosity or volume changes. Different models available for all types of laboratory stirring applications up to 10 liters. Accurate stepless speed control with digital display allows smooth variation up to 1200 rpm.

“MLH” series Magnetic Stirrers with hot plate are similar to the ML series of magnetic stirrers but have additional stainless steel hot plate. Heat energy is controlled by energy regulator.

### Rotamantles

These are specially designed to meet laboratory requirement of convenient stirring in flask with simultaneous uniform heating by heating mantles. These have two tier constructions with the upper

compartment consisting of heating element. Accurate stepless speed control allows smooth variation up to 1200 rpm. Heating energy is controlled by energy regulator.

### Salient Features :

- PMDC motor for higher torque even at low speeds
- Better speed regulation even with small volume & low speeds
- Accurate stepless speed control maintains excellent speed stability
- Digital Speed Indicator for display of stirring speed
- Totally enclosed unit
- Designed for use even in corrosive atmosphere

Technical Data							
Models	Stirring Capacity	Heating Capacity	External Dimensions (WxDxH) mm	Stirring Paddle (PTFE Coated)			
				Ltrs.	Watts	Model	Ø x length
<b>Stirrers without Hotplate</b>							
MS-500	500 ml	-	105 x 135 x 70	Q-18A		7 x 15mm	
<b>Stirrers without Hotplate (with Digital Speed Indicator)</b>							
1-ML	1	-	150 x 220 x 150	Q-19		9 x 25mm	
2-ML	2	-	150 x 220 x 150	Q-19A		9 x 35mm	
5-ML	5	-	180 x 220 x 150	Q-20A		13 x 50mm	
<b>Stirrers with Hotplate (with Digital Speed Indicator)</b>							
1-MLH	1	150	200 x 225 x 185	Q-19		9 x 25mm	
2-MLH	2	300	200 x 225 x 185	Q-19A		9 x 35 mm	
5-MLH	5	500	200 x 225 x 185	Q-20A		13 x 50 mm	
<b>Rotamantles</b>							
1-RML	1	300	210 x 210 x 205	Q-19		9 X 25 mm	
2-RML	2	400	260 x 260 x 240	Q-19A		9 X 35 mm	
3-RML	3	500	300 x 300 x 260	Q-20A		13 x 50 mm	

Supply: 220-240 Volts 50 Hz Single Phase.



10 MLH Plus



5 MLH Plus

REMI presents the next generation of magnetic stirrers with new stir technology. These are available in both hotplate & without hotplate versions.

#### Salient Features :

- Speeds range 150 - 1500 rpm
- Stainless Steel Hot Plate model for temperatures up to 340°C
- Ceramic Hot Plate model for temperatures up to 550°C (10 MLH Plus)
- Easy-to-read backlit LCD for display of set & actual parameters
- Monitoring of set & actual temperature / speed
- High accuracy of temperature control with embedded dual sensors
- Advanced Stirrers with microprocessor technology
- Constant speed even with change of load / Voltage
- Maintenance free brushless motor
- Scratch proof & excellent chemical resistance
- External temperature probe (PT-1000) for control of fluid temperature
- Last parameter recall, ideal for repetitive processes
- Unique safety temperature control system
- Settable safe temperature limit to avoid overheating
- Residual Temperature warning when unit is switched off for operator safety

## Technical Data

Model	5-MLH Plus	10-MLH Plus	20-ML Plus
Power [W]	550	1050	50
Max. stirring quantity (Water)(Liters)	5	10	20
Stirring Paddle (PTFE coated)	Q-19A (9 X 35mm)	Q-20A (13 X 50mm)	Q-20A (13 X 50mm)
Motor rating input [W]	18	18	18
Motor rating output [W]	10	10	10
Speed range [rpm]	150-1500	150-1500	150-1500
Speed / Temperature display	LCD	LCD	LCD
Speed display resolution [rpm]	1	1	1
Top Plate Material	Stainless Steel	Ceramic Glass	Stainless Steel
Dimension of Top Plate [mm]	Φ157	184 x 184	300 x 350
Heating power [W]	500	1000	-
Temperature Range	Up to 340°C	Up to 550°C	-
Control accuracy of heating temperature	1°C	1°C	-
Residual Heating Warning Alarm	Above 50°C	Above 50°C	-
Control accuracy of heating temperature with PT-1000	0.2°C	0.2°C	-
External Temperature sensor	PT-1000	PT-1000	-
Dimensions (WxDxH) [mm]	342 x 210 x 115	360 x 215 x 112	300 x 350 x 100
Protection class acc. to DIN EN60529	-	IP 21	-

Supply: 220-240 Volts, 50 Hz Single Phase.

## Magnetic Stirrer

## Salient Features :

- Large LCD screen
- Microprocessor controller
- Stepless speed regulation
- Aluminum alloy working plate
- Over-temp alarm system, auto switch off when 380°C
- Caution indication light: auto switch on when working plate temperature is over 50°C



15-MLH Plus

## Technical Specifications

Model	15-MLH Plus
Stirring capacity (H <sub>2</sub> O) (Liters)	15
Speed range(rpm)	200 - 1800
Heating power (Max. W)	750W
Input power (Max. W)	800W
Working plate temp range (°C)	RT+5~380°C
Stirring Paddle (PTFE coated)	Q-20A (13 x 50mm)
Plate dimension (mm)	180X180
Exterior dimension (W x D x H) (mm)	210X330X130
Weight (KG)	4.5

Supply: 220-240 Volts, 50 Hz Single Phase.



VM-100

The Multi-Tube Vortexer is designed for mechanical and chemical cell lysis, mixing suspensions, and general sample agitation. The Multi-Tube Vortex mixer is a tool to provide that extra degree of mixing, however it accommodates full racks of tubes or microwell plates, vials or cylinder as opposed to single tubes. Consequently, this unit is useful for higher throughput mixing of samples. The suction-cup feet dampen motion and prevent sliding on work surface. Equipped with a powerful, permanent magnet motor with sealed ball bearings.

The variable speed microprocessor control provides consistent uniform mixing action

#### LCD Display :

Touch pad controls with easy-to-read, independent LCD displays for speed and time allow operator to view both settings at once.

#### Pulsing Mode :

Programmable pulsing mode allows user to adjust the pulse-on and pulse-off times between 1 and 59 seconds in 1 second intervals.

Technical Data	
Specifications	VM-100
Speed Range*	500 to 2500
Timer	1 sec to 999 Hrs.
Orbit	3.6 mm
Maximum Weight Capacity	24 x 15 ml
Duty Rating	Continuous
Tray Dimensions (L x W) mm	313 x 180
Overall Dimensions (W x D x H)mm	400 x 325 x 430

Supply: 220-240 Volts 50 Hz Single Phase.

\* Maximum speed will vary depending on load

## Cyclo Mixer

#### Vortex Mixers

- Designed for mixing liquids in Schools, Laboratories & Factories
- Touch/Continuous Operation mode Selection through bi-directional Switch
- Speed Regulation through knob provided on the control panel
- Interchangeable mixing heads for use with variety of tubes
- Supplied with all interchangeable mixing heads



CM-101 Plus

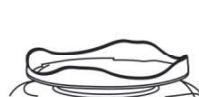


CM-101

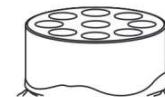
Technical Data		
Models	CM-101 PLUS	CM-101
Power (W)	32	
Shaking Movement	Orbital	
Orbital Diameter (mm)	4	
Motor Type	Shaded-Pole Motor	
Permissible ON time	100% power 30mins	
Speed range (rpm)	0-2500	
Run Type	Continuous / touch operation	
Dimensions (mm)	185 x 150 x 165	178 x 141 x 148
Weight (kg)	2.8	3.6
Protection Class acc. to DIN 60529	IP 21	-

Supply: 220-240 Volts, 50 Hz Single Phase.

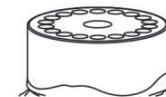
Interchangeable Mixing Heads	
Models	Description
CM-01	Universal top 100 mm- plate attachment
CM-01/01	Tube adapter for 18 holes test tubes Ø 10mm (use with CM-01)
CM-01/02	Platform pad for < Ø 99mm tubes and small vessels (use with CM-01)
CM-01/03	Tube adapter for 8 holes test tube Ø 20mm (use with CM-01)



CM - 01



CM - 01/03



CM - 01/01



REMI Water Bath is multipurpose water bath with adjustable double line six holes to hold different size samples for easy & hygienic heating. RWB provides precise and constant temperature helps achieving uniform heating for the samples.

#### Salient Features:

- Microprocessor control with timing function
- Digital display
- Audible and visual alarm for over temperature

Technical Data	
Parameter	RWB 6
Temperature range	RT ± 5°C ~99°C
Temperature stability	±0.5°C
Tracking alarm	±2°C
Chamber volume	15 Ltrs
Interior Dimension (W×D×H, mm)	450×300×110
Timing range	1~999 min.
Remark	Double lines six holes
Electrical requirements	220V, 50Hz, Single phase
Power Consumption	1500W

Supply: 220-240 Volts, 50 Hz Single Phase. -

## Water Bath Shakers



#### Water Bath Shaker RSB - 12

These Water bath Shakers have wide applications in Biotechnology, Micro - Biology, Chemistry, Quality Control and other life sciences laboratories.

These units are double walled with exterior body and inner chamber of stainless steel having effective insulation in between. The stainless steel bath has size of 355 mm (W) x 300 mm (D) x 165 mm (H). A special pyramid type cover provided avoids evaporation of water and makes condensed water to fall back in the bath. A cock is provided to facilitate draining of Bath contents.

The removable stainless steel tray houses lotus clamps for variety of flask capacities. Standard unit supplied with tray accommodating 12 flasks x 100 ml. while trays with the following capacity are available optionally.

50 ml x 12 flasks	150 ml x 9 flasks
250 ml x 6 flasks	500 ml x 4 flasks
1000 ml x 2 flasks	2000 ml x 1 flask
Test Tube racks	

#### Salient Features :

- Inner chamber and outer body of SS 304
- Heating up to 95°C
- Digital Temperature Indicator cum Controller with precise accuracy of ± 1°C
- Shaking speed range from 40 to 180 strokes per min
- Stroke length 25 mm

Supply: 220-240 Volts, 50 Hz Single Phase.

WORLD CLASS  
PREMIUM RANGE

NEYA



Designed



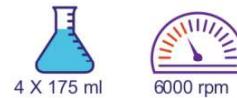
Derived from the Hindi word "NAYA" which means "new", "novelty", "innovation", "NEYA" is the name given to the new generation of centrifuges recently developed by REMI.

REMI, market leader in centrifuges with over 55 years of manufacturing experience, combined with European design and style, makes a perfect combination to develop and present the whole range of "NEYA" centrifuges with performance and characteristics suitable for all the operational needs of modern laboratories.

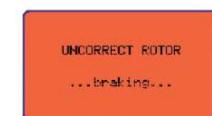
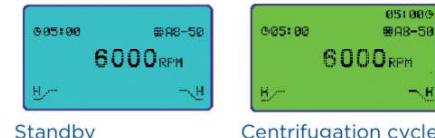
It is with these premises, we are pleased to present the new range of "NEYA" Centrifuge.

***NEYA..... a new concept..... a new generation***

- Automatic rotor detection, check for presence of rotor and compatibility with maximum rated speed
- Safety speed limiter function
- Controlled by microprocessor
- Backlit color LCD display with contemporary visualization of all parameters
- Digital adjustment of acceleration and deceleration levels
- Compact sizes to optimize the space in laboratory
- Stainless steel internal bowl with optimal height for loading and unloading of samples
- Imbalance detection system with automatic functioning stop to avoid accidents
- Automatic locking system of the lid
- Safety opening of the lid in case of power failure
- Brushless motor maintenance free and no carbon deposits
- Construction in accordance with European directives



- Maximum capacity 4 x 175 ml
- Maximum speed 6000 rpm



Alarm signal

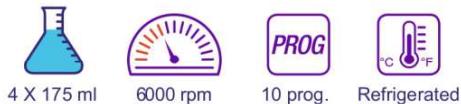
Technical Data	
Features	NEYA-8
Maximum capacity	4 x 175 ml (swing out) - 6 x 100 ml (fixed angle)
Maximum speed	4500 rpm (swing out) - 6000 rpm (fixed angle)
Setting RPM	Yes
Setting RCF	-
Display RCF	-
Timer	00:30 to 99:50 (mm:ss) and continuous mode
Date and Time	Yes
Acceleration levels	L-M-H (Low - Medium - High)
Deceleration levels	L-M-H (Low - Medium - High)
Spin function	-
Programs	-
Indication of rotor	Yes
Noise	≤ 55 dB
Directive / Standard	IEC 61010-1 ; IEC 61010-2-020
External dimensions WxDxH/Weight	450 x 590 x 330 mm / 40 Kg

Supply: 220-240 Volts, 50 Hz Single Phase.

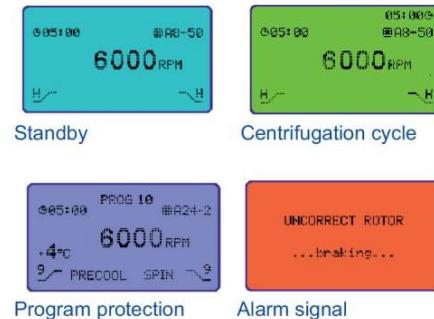
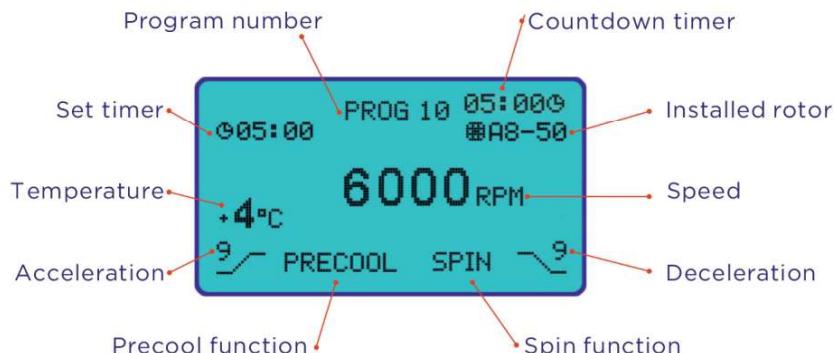


Optimal height for load and download of samples

- Automatic rotor detection, check of presence of accessories and compatibility with maximum speed
- Safety speed limiter function
- 10 storable programs with protection function
- Setting of speed in RPM and RCF
- Short Spin function and precool (NEYA 10R)
- Temperature range from 0°C to +40°C (NEYA 10R)
- Controlled by microprocessor and backlit color LCD display with contemporary visualization of all parameters
- Digital adjustment of acceleration and deceleration levels
- Stainless steel internal bowl with optimal height for loading and of samples
- Imbalance detection system with automatic functioning stop to avoid accidents
- Automatic locking system of the lid
- Safety opening of the lid in case of power failure
- Brushless motor maintenance free and no carbon deposits
- Construction in accordance with European directives



- Maximum capacity 4 x 175 ml
- Maximum speed 6000 rpm



Technical Data		
Features	NEYA-10	NEYA-10R
Maximum capacity	4 x 175 ml (swing out) - 6 x 100 ml (fixed angle)	
Maximum speed	4500 rpm (swing out) - 6000 rpm (fixed angle)	
Setting RPM	Yes	
Setting RCF	Yes	
Display RCF	Yes	
Timer	00:30 to 99:50 (mm:ss) and continuous mode	
Date and Time	Yes	
Acceleration levels	0-9 (0 = min - 9 = max)	
Deceleration levels	0-9 (0 = min - 9 = max)	
Temperature range	-	0°C to +40°C
Precool function	-	Yes
Display temperature	-	Yes (°C and °F)
Spin function	Yes	
Programs	10 programs with protection function	
Indication of rotor	Yes	
Noise	≤ 55 dB	≤ 55 dB
Directive / Standard	IEC 61010-1 ; IEC 61010-2-020	
External dimensions WxDxH/Weight	450 x 590 x 330 mm / 40 Kg	730 x 640 x 330 mm / 70 Kg
Recommended Voltage Stabilizer	-	VS-02

Supply: 220-240 Volts, 50 Hz Single Phase.

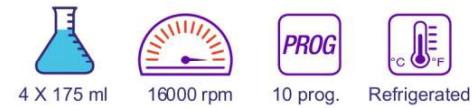
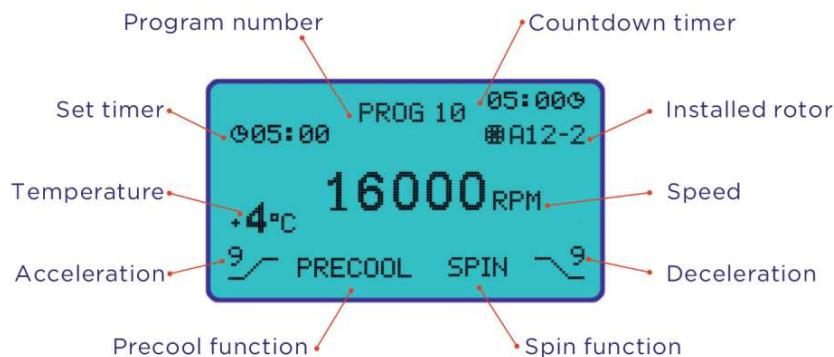


Ventilated centrifuge NEYA 10

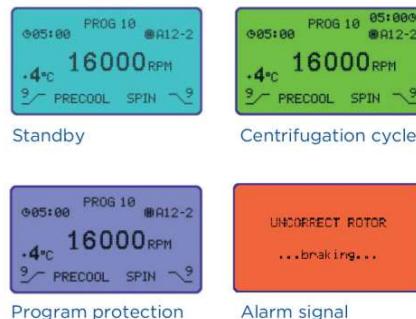


Visual signal of end of centrifugation

- Automatic rotor detection, check of presence of accessories and compatibility with maximum speed
- Safety speed limiter function
- 10 storable programs with protection function
- Setting of speed in RPM and RCF
- Short Spin function and precool (NEYA 16R)
- Temperature range from 0°C to +40°C (NEYA 16R)
- Controlled by microprocessor and backlit color LCD display with contemporary visualization of all parameters
- Digital adjustment of acceleration and deceleration levels
- Stainless steel internal bowl with optimal height for loading and unloading of samples
- Imbalance detection system with automatic functioning stop to avoid accidents
- Automatic locking system of the lid
- Safety opening of the lid in case of absence of electric power
- Brushless motor maintenance free and no carbon deposits
- Construction in accordance with European directives



- Maximum capacity 4 x 175 ml**
- Maximum speed 16000 rpm**



Technical Data		
Features	NEYA-12	NEYA-16R
Maximum capacity	6 x 50 ml (fixed angle)	4 x 175 ml (swing out) - 6 x 100 ml (fixed angle)
Maximum speed	16000 rpm (fixed angle)	4500 rpm (swing out) - 16000 rpm (fixed angle)
Setting RPM	Yes	
Setting RCF	Yes	
Display RCF	Yes	
Timer	00:30 to 99:50 (mm:ss) and continuous mode	
Date and Time	Yes	
Acceleration levels	0-9 (0 = min - 9 = max)	
Deceleration levels	0-9 (0 = min - 9 = max)	
Temperature range	-	0°C to +40°C
Precool function	-	Yes
Display temperature	-	Yes (°C and °F)
Spin function	Yes	
Programs	10 programs with protection function	
Indication of rotor	Yes	
Noise	≤ 55 dB	≤ 55 dB
Directive / Standard	IEC 61010-1 : IEC 61010-2-020	
External dimensions WxDxH/Weight	450 x 590 x 330 mm / 40 Kg	730 x 640 x 330 mm / 70 Kg
Recommended Voltage Stabilizer	-	VS-02

Supply: 220-240 Volts, 50 Hz Single Phase.

## Technical Data

		NEYA 8	NEYA 10	NEYA 10R	NEYA 12	NEYA 16R
Max. Speed	rpm	6000	6000	6000	16000	16000
Max. RCF	g	4800	4800	4800	21000	21000
Max. Tube size	ml	175	175	175	50	175
Max. capacity		700	700	700	300	700
No. of Programs		-	10	10	10	10
Acceleration*		H-M-L	10 Profiles	10 Profiles	10 Profiles	10 Profiles
Deceleration*		H-M-L	10 Profiles	10 Profiles	10 Profiles	10 Profiles
Lowest Temp.*	°C	-	-	0	-	0
 S 4-175 max 4500 rpm max 3600 g		✓	✓	✓		✓
 S 6-96 MP 6 x 96 deep wells max 3200 pm		✓	✓	✓		✓
 A 32-15 32 x 15 ml max 5200 rpm max 4020 g		✓	✓	✓		✓
 A 8-50 8 x 50 ml max 6000 rpm max 4800 g		✓	✓	✓		✓
 A 24-2 24 x 2 ml max 15000 rpm max 21000 g					✓	✓
 A 36-05 36 x 0.5 ml max 15000 rpm max 21000 g					✓	✓
 A 6-100 6 x 100 ml max 5000 rpm max 3330 g		✓	✓	✓		✓
 A 6-50 6 x 50 ml max 9500 rpm max 10050 g					✓	✓
 PCR 4-8 4 strip of 8 PCR max 15000 rpm max 21000 g					✓	✓
 A 12-5 12 x 5 ml max 15000 rpm max 20380 g					✓	✓
 A 12-2 12 x 2 ml max 18000 rpm max 18140 g					✓	✓
 HE 24-75 Ø1 x 75 mm max 12000 rpm max 15300 g 24 capillars					✓	✓

## Notes:

- \* Depending on capacity, type of rotor, centrifugation speed, ambient temperature and other process parameters
- # High - Medium - Low

## Selection guide for rotors

## Nomenclature method of Rotors &amp; accessories

Alphabets in beginning	Numbers in middle	Alphabets at end
A= Fixed angle rotor	1st numerical = Quantity per insert	F= Falcon® tube
S= Swing out rotor	2nd numerical = Tube capacity (ml)	R = Round bottom tube
B= Bucket		L= Long Tube
I= Insert for bucket		S= Short Tube
C= Cushion		
RE= Reducer		
HE= Haemocrit Rotor		

Examples	
S 4-175	(Swing out Rotor, 4 tubes of 175ml capacity)
A 32-15	(Angle Rotor, 32 tubes of 15ml capacity)
B 2-50F	(Bucket, 2 tubes of 50ml capacity, Falcon®)
I 1-50R	(Insert, 1 tube of 50ml capacity round bottom)
C-15F	(Cushion for 15ml Falcon®)
RE 15-5/7L	(Reducer from 15ml to 5/7 ml long tube)

## Options to be selected from following Rotors

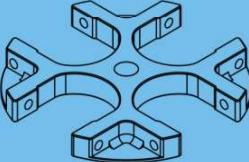
 <b>Swing Out Rotor</b> <b>S 4-175</b> Max. Speed (RPM) 4500 Max. RCF (g) 3600		Metal Buckets suitable for Swing Out Rotor S 4-175 (Set of 4 buckets)									
		B 175 (with Bio safety Lid L 175)		B 2-50 F B 2-50 R		B 7-15 F B 7-15 R		B 12-10		B 14-5/7	
											

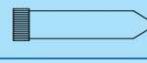
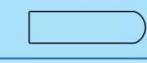
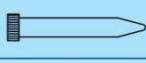
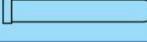
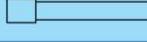
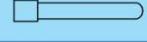
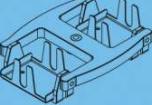
Image of Tube						
Tube Capacity (ml)	175	100		50		15
Ø x L (mm)	57 x 99	45 x 104		29 x 116	30 x 110	
Max. Cap dia (mm)	59.5			34.5		22.5
Type of Tube	Plastic	Glass / Plastic*		Falcon®	Glass / Plastic*	
No of tubes/insert	1	1	1	2	1	2
No of tubes/rotor	4	4	4	8	4	8
Bucket Cat No.	B 175	B 175	B 175	B 2-50 F	B 175	B 2-50 R
Insert Cat No.		I 1-100	I 1-50-F		I 1-50 R	I 4-15 F
Image of Insert (Set of 4, supplied with suitable bottom cushions)	No			No		
Tubes supplied	Yes	Yes (Glass)	No	Yes (Glass)	No	Yes (Glass)

Image of Tube				
Tube Capacity (ml)	10	5-7	5-7	2
Ø x L (mm)	15.5 x 106	12.5 x 106	12.5 x 81	11 x 42
Max. Cap dia (mm)	17	16	16	
Type of Tube	Vacutainer®		Vacutainer®	
No of tubes/Insert	7	12	7	16
No of tubes/rotor	28	48	28	64
Bucket Cat No.	B 175	B 12-10	B 175	B 16-5/7
Insert Cat No.	I 7-10		I 7-5/7	I 12-2
Image of Insert (Set of 4, supplied with suitable bottom cushions)		No		No
Tubes supplied	No	No	No	No

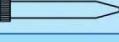
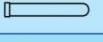
<b>Swing Out Rotor S 6-96 MP</b> Max speed RPM 3200 Max RCF (g) 1950	
	
Image of Tube	
Tube Capacity (ml)	6 x 96 wells
Type of Tube	Micro
No of tubes/rotors	6
W x D x L (mm)	127 x 84 x 18
Tubes supplied	No

<b>PCR Rotor PCR 4-8</b> Max speed RPM 15000 Max RCF (g) 21000	
	
Image of Tube	
Tube Capacity (ml)	4 strips of 8 PCR
Type of Tube	PCR
No of tubes/rotors	4
Ø x L (mm)	6 x 78
Tubes supplied	No

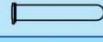
<b>Angle Rotor HE 24-75</b> Max speed RPM 12000 Max RCF (g) 15300	
	
Image of Tube	
Tube Capacity (ml)	—
Type of Tube	Capillary
No of tubes/rotors	24
Ø x L (mm)	1 x 75
Tubes supplied	Yes



W x D x H      127 x 84 x 18

<b>Angle Rotor A 32-15</b> Max speed RPM 5200 Max RCF (g) 4020	Image of Tube					
	Tube Capacity (ml)	15	15	10	5/7	5/7
	Type of Tube	Falcon®	Plastic	Vacutainer®	Vacutainer®	Vacutainer®
	Insert Cat No	C 15F	No	No	RE 15-5/7L	RE 15-5/7S
	No of tubes/Insert	1	1	1	1	1
	No of tubes/rotors	32	32	32	32	32
	Ø x L (mm)	16.5 x 120	17 x 102	15.5 x 106	12.5 x 106	12.5 x 81
Tubes supplied						
No      Yes      No      No      No      No						

(Rotor is supplied with suitable SS tubes as carriers)

<b>Angle Rotor A 8-50</b> Max speed RPM 6000 Max RCF (g) 4800	Image of Tube					
	Tube Capacity (ml)	50	50	15	15	10
	Type of Tube	Falcon®	Plastic	Falcon®	Plastic	Vacutainer®
	Insert Cat No	C 50F	No	RE 50-15F	RE 50-15R	RE 50-10
	No of tubes/Insert	1	1	1	1	1
	No of tubes/rotors	8	8	8	8	8
	Ø x L (mm)	29 x 116	30 x 100	16.5 x 120	17 x 102	15.5 x 106
Tubes supplied						
No      Yes      No      Yes      Yes						

(Rotor is supplied with suitable SS tubes as carriers)

## Selection guide for rotors

**Angle Rotor A 6-100**

Max speed RPM 5000

Max RCF (g) 3330

Image of Tube					
Tube Capacity (ml)	100	50	50	15	15
Type of Tube	Glass / Plastic	Falcon®	Glass / Plastic	Falcon®	Round Plastic/Glass
Insert Cat No	No	RE 100-50F	RE 100-50R	RE 100-15F	RE 100-15R
No of tubes/Insert	1	1	1	1	1
No of tubes/rotors	6	6	6	6	6
Ø x L (mm)	45.5 x 104	29 x 116	30 x 110/100	16.5 x 120	17 x 102/110
Tubes supplied	Yes (Plastic)	No	Yes (Plastic)	No	Yes (Plastic)

**Angle Rotor A 12-5**

Max speed RPM 15000

Max RCF (g) 20880

Image of Tube	
Tube Capacity (ml)	5
Type of Tube	Micro
Insert Cat No	No
No of tubes/Insert	-
No of tubes/rotors	12
Ø x L (mm)	16 x 59
Tubes supplied	No

(Rotor is supplied with suitable SS tubes as carriers)

**Angle Rotor A 6-50**

Max speed RPM 9500

Max RCF (g) 10050

Image of Tube					
Tube Capacity (ml)	50	50	15	15	10
Type of Tube	Falcon®	Plastic	Falcon®	Plastic	Vacutainer®
Insert Cat No	C 50F	C 50R	RE 50-15F	RE 50-15R	RE 50-10
No of tubes/Insert	1	1	1	1	1
No of tubes/rotors	6	6	6	6	6
Ø x L (mm)	29 x 116	30 x 100	16.5 x 120	17 x 102	15.5 x 106
Tubes supplied	No	Yes	No	Yes	No

**Angle Rotor A 36-05**

Max speed RPM 15000

Max RCF (g) 21000

Image of Tube		
Tube Capacity (ml)	0.5	0.2
Type of Tube	Micro	Micro
Insert Cat No	No	RE 05-02
No of tubes/Insert	1	1
No of tubes/rotors	36	36
Ø x L (mm)	7.5 x 31	6 x 22
Tubes supplied	No	No

(Rotor supplied with all suitable inserts)

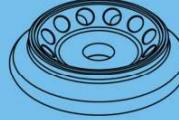
**Angle Rotor A 24-2**

Max speed RPM 15000

Max RCF (g) 21000

Image of Tube			
Tube Capacity (ml)	2	0.5	0.2
Type of Tube	Micro	Micro	Micro
Insert Cat No	No	RE 2-05	RE 2-02
No of tubes/Insert	1	1	1
No of tubes/rotors	24	24	24
Ø x L (mm)	11 x 41	7.5 x 31	6 x 22
Tubes supplied	No	No	No

(Rotor supplied with all suitable inserts)

**Angle Rotor A 12-2**

Max speed RPM 16000

Max RCF (g) 16140

Image of Tube			
Tube Capacity (ml)	2	0.5	0.2
Type of Tube	Micro	Micro	Micro
Insert Cat No	No	RE 2-05	RE 2-02
No of tubes/Insert	1	1	1
No of tubes/rotors	12	12	12
Ø x L (mm)	11 x 41	7.5 x 31	6 x 22
Tubes supplied	No	No	No

(Rotor supplied with all suitable inserts)

**ZERO COMPROMISE MODELS**  
 • BRUSHLESS  
 • ECONOMICAL



Medico Plus

Image of Swing Out Rotors		
Model	SM 4-50	SM 8-15
Max speed RPM	4000	4000
Max RCF (g)	2220	2270
Image of Tube		
Tube Capacity (ml)	50	15
Type of Tube	Glass	Glass
No of tubes/rotors	4	8
Ø x L (mm)	30 x 110	17 x 110
Tubes supplied	Yes	Yes

The most popular model is now available with brushless motor, door safety interlock, digital speed indicator and timer. Ideal for routine centrifuging requirements of medical practitioners, diagnostic laboratories and hospitals.

#### Salient Features :

- Brushless induction motor
- Speed control through VFD
- Microprocessor controller
- Feather touch keys
- Smooth and soft start
- Green LED display
- Lid interlock
- Dynamic brake
- Imbalance detection
- Emergency lid opening
- Accurate speed  $\pm 10$  RPM
- Timer upto 99 minutes
- Last parameter recall
- Calibration window
- Elgant lid and front panel
- Choice of swingout / Angle rotors

#### Nomenclature method of Rotors

Alphabets in beginning	Numbers in middle
A= Fixed angle rotor	1st numerical = Quantity per insert
S= Swing out rotor	2nd numerical = Tube capacity (ml)

Technical Data		
Models		Medico Plus
Capacity	ml	300 ml
Max. Speed	RPM	4000
Max. RCF	'g'	2270
W x D x H	mm	325 x 370 x 280

Supply: 220-240 Volts, 50 Hz Single Phase.

**Swingout Rotors are supplied with suitable SS tubes as carriers**

Image of Angle Rotors					
Model	AM 36-5	AM 6-50	AM 12-15	AM 20-5	AM 18-10
Max speed RPM	4000	4000	4000	4000	4000
Max RCF (g)	2040	2130	2180	2090	2090
Image of Tube					
Tube Capacity (ml)	5	5	50	50	15
Type of Tube	Glass	Vacutainer® short	Glass	Plastic	Glass
No of tubes/rotors	36	36	6	6	12
Ø x L (mm)	12 x 75	12.5 x 81	30 x 110	30 x 100	17 x 110
Tubes supplied	No	No	No	Yes	Yes

# Medico / Doctor Centrifuges



C - 852



R - 303



C - 854 / 8

## Medico / Doctor Centrifuges

These are low priced units meeting the majority of the small capacity centrifuging requirements of medical practitioners, pathological laboratories and hospitals for routine centrifuging tests. The

units are fitted with resiliently mounted motor for vibration free performance having built in 5 step speed regulator. Available with Swing out or Angle rotor.

Technical Data						
Models	C-852	C-854/4	C-854/6	C-854/8	R-303	R-304
Capacity	ml	4 X 15	4 X 15	6 X 15	8 X 15	8 X 15
Type of Head			Swing Out			Angle
No. of Tubes		4	4	6	8	24
Max. Speed	RPM	3500	3500	3500	3800	7000
Max. RCF	'g'	1750	1850	1600	1600	4760
W X D X H	mm	295 x 295 x 25		310 x 310 x 295		210 x 210 x 250

Supply: 220-240 Volts, 50 Hz Single Phase.

## Mini Centrifuge



RM-02 Plus

Powerful and easy-to-use RM 02 Plus mini centrifuges are small enough so that each workstation can be equipped with a personal centrifuge. Extremely compact footprint saves valuable bench space

### Salient Features :

- Brushless DC (BLDC) Motor
- Settable speed (upto 6000 RPM) and time (upto 99 minutes). digital display can process upto 8 microtubes of 1.5/2 ml at a time
- Unique Closed rotor reduces friction to ensure better airflow, low heat generation & whisper quiet operation
- Electronic brake for immediate stop on lid opening for user safety
- Save time by doing quick runs by simple opening and closing the lid
- User calibration facility
- Carbon isolation feature (dust does not enter rotor chamber)
- Replaceable strip rotor & adaptors for 0.2 ml & 0.4/0.5 ml microtubes

Specifications	Technical Data	RM-02 Plus
Rotor Capacity		8 place closed rotor for 1.5/2.0ml microtubes
Speed RPM / RCF (g)		6000/2000 g
Digital Display		Yes
Electronic Safety Brake		Yes
Noise Level		≤ 55 dB
Power Supply		Universal (95 to 230V, 50/60Hz)
Dimensions (WxDxH) in mm		162 x 157 X 115 mm
Rubber suction pads		Yes
Rotors and Adaptors (included in standard pack)		8 Slot x 1.5/2.0 ml Closed Rotor PCR Strip Rotor (2 x 8 x 0.2 ml) Reduction Adaptors for 0.2 / 0.4 ml microtubes

Supply: 220-240 Volts, 50 Hz Single Phase.



RM-03 Plus

### Salient Features

- Microprocessor controlled with last run memory feature
- Large back - lit LCD display shows multiple parameters at a time
- Brushless DC motor - maintenance free, delivers better power to weight ratio and fit for extended runs
- Imbalance detection with auto cut off
- Lid lock safety - Lid opens automatically on run completion
- Intuitive simple interface for quick and convenient setting
- 1 to 999 Mins countdown timer with Min sec display
- One touch Short- Spin operation
- Extremely compact footprint saves valuable bench space-suitable for use in fume hoods or cold rooms
- Unique airflow design - ensures lesser heat generation and lesser noise
- Rotor, inner centrifuge lid and lid latch are made of metal for maximum operational safety
- Soft - touch lid closure for ergonomic lid locking
- Settable RPM/RCF

### Technical Data

Specifications	RM-03 Plus
Rotor Capacity	12 place closed rotor with metal safety lid
Maximum Speed RPM / RCF (g)	15000 rpm / 15596 g
Display	Large Backlit LCD display
Imbalance detection	Imbalance Detection with auto cut - off
Noise Level	≤ 60 dB
Motor Type	(BLDC) Brushless DC motor
Timer setting	1 to 999 mins
Speed / Time setting	500 to 15000 RPM / Min-Sec timer
Dimensions (WxDxH) in mm	230 x 262 x 131 mm
Rotors and Adaptors (included in standard pack)	12 place x 1.5/2.0 ml microtubes
	Reduction Adaptors for 0.2 ml microtubes
	Reduction Adaptors for 0.4/0.5 ml microtubes
	PCR Strip Rotor (2 x 8 x 0.2 ml with metal safety lid)

Supply: 220-240 Volts, 50 Hz Single Phase.

### Compact Laboratory Centrifuges

R - 4C Compact model for routine work in medical and industrial laboratories has digital speed indicator and 0-60 minute digital countdown timer.

#### Salient Features :

- Stepless speed regulator
- Safety Lid interlock to prevent cover opening during centrifugation
- Wide choice of Swing out / Angle rotors and reduction adaptors

Technical Data		
Models		R-4C
Max. Speed	rpm	4400
Max. RCF	'g'	2350
Max. Capacity	ml	200
W x D x H	mm	330 x 370 x 295

Supply: 220-240 Volts, 50 Hz Single Phase.



**R-4C**

Rotor Head Listing				Reduction Adaptors (With Glass Tubes)						
Models	Capacity	Max. Speed	Max. RCF	RA-501	RA-502	RA-151	RA-152	RA-153	RA-154	
		RPM	'g'	(1X15ml)	(1X30ml)	(1Xwintrob)	(1X3ml)	(1X5ml)	(1X8ml)	
Swing out Heads (with glass tubes)										
R-41	8 X 15ml	3500	1850	X	X	✓	✓	✓	✓	✓
R-42	4 X 50ml	3500	1850	✓	✓	X	X	X	X	X
Angle Heads (with polypropylene tubes)										
R-43	8 X 15ml	4400	2200	X	X	✓	✓	✓	✓	✓
R-44	4 X 50ml	4200	2350	✓	✓	X	X	X	X	X

### Special Purpose Centrifuge

R-8K Centrifuge incorporates stepless Speed Regulator, digital Timer and speed meter. It has been designed specifically to suit the following special applications.

- 1) Testing Diesel Fuel Filters for determination of dust concentrate as per IS: 3351:1991. Useful for fuel filters for testing the purity and suitability of the oil.
- 2) Test of Infant Milk Food as per IS:1547:1985 for determination of solubility index in Infant Milk Foods.
- 3) For determination of Insolubility Index of dried milk and dried Milk products as per IS: 12759:1989.
- 4) For determination of Sulphates in Chrome solution.

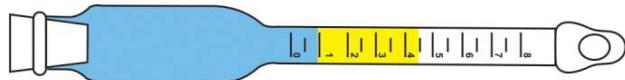
Technical Data		
Max. Speed	rpm	4800
Max. RCF	'g'	3730
Max. Capacity	ml	200
W x D x H	mm	400 x 420 x 315

Supply: 220-240 Volts, 50 Hz Single Phase.

Rotor Heads Listing			
Models	Description	Max. Speed RPM	Max. RCF 'g'
R-80	8 place Swing Out Rotor with Glass Tubes suitable for determination of Dust concentrate in Diesel Fuel Filters	4400	3240
R-86	4 place Swing Out Rotor with Glass Tubes suitable for determination of Solubility index in infant milk foods & insolubility index of dried milk & dried milk products	4800	3730
R-87	4 place Swing Out Rotor with Glass Tubes suitable for determination of sulphate in chrome plating solution	4300	3260



Butyrometer in compliance with DIN 12836/ BIS 1223:2001 for determining fat content according to Gerber's method



Gerber Instruments founded by Dr. Niklaus Gerber is a pioneer for the quality determination of fat in milk and dairy products and solubility of milk powder according to Gerber for more than 120 years. The Gerber method is being used as reference method to determine the fat content worldwide. REMI is proud to be associated with Gerber to offer REMI-Gerber Centrifuge for the dairy industry

For the determination of fat and fat extraction, centrifuges are the basic equipment in every laboratory. With this centrifuge, these tests can be carried out

- Fat determination according to Gerber
- Fat extraction according to Roese-Gottlieb and Mojonnier
- Solubility determination according to Gerber and ADPI

#### Specifications :

- Timer 0 to 99 minutes
- Automatic brake
- Heating with variable temperature setting (1000 W)
- Microprocessor control with digital reading
- Cover lock
- Inclusive of rotor to accommodate 12 butyrometers (not supplied)

Technical Data	
Model No.	Micro III
Control	Microprocessor control
Timer	0 to 99 minutes
Power	220 to 240V
Frequency	50 Hz
Heating	1000 W adjustable up to 65°C
Dimension (WxDxH) mm	430 x 460 x 280
Weight	32 kg

Supply: 110 Volts / 220-240 Volts 50 Hz Single Phase.

#### Note:

This centrifuge can be used with butyrometers of any make

Laboratory Centrifuges model **R-8C** is suitable for routine sample analysis in Medical, Hospital, Pathology and Institutional laboratories. With a wide choice of rotor heads and adaptors, this unit are truly versatile.

Micro Centrifuges model **RM-12C** is ideal for growing routine application in biochemical and clinical labs, for Hematocrit,Corpuscle Percentage contents in blood, Serum analysis and precipitate separation etc.

#### Salient features:

- Digital Speed Indicator
- Stepless speed regulator
- 0-99 minutes digital countdown timer
- Imbalance detector with cut off
- Safety Lid interlock to prevent cover opening during centrifugation
- Press Switch for quick acceleration to full speed (RM-12C)



R - 8C

Technical Data			
Models	R-8C	RM-12C	
Max. Speed	rpm	5250	16000
Max. RCF	'g'	300	16600
Max. Capacity	ml	300	40
W x D x H	mm	365 x 415 x 350	280 x 350 x 290

Supply: 220-240 Volts 50 Hz Single Phase.

## Laboratory / Micro Centrifuges



R-8C BL

Laboratory Centrifuges model **R-8C BL** is suitable for routine sample analysis in Medical, Hospital Pathology and Institutional laboratories.

- 7 segment LED display of speed
- Digital countdown timer & continuous run
- Safety lid interlock to prevent lid opening during centrifugation
- Imbalance detection & centrifugation stop with display of error
- Dynamic brake for quick deceleration
- Motor overload protection
- Gas hinge to prevent door falling
- Emergency lid lock release
- Last set parameters recall (Useful for repetitive analysis)
- Wide variety of rotors & reduction adaptors

#### Salient Features:

- Stainless Steel centrifuge Chamber, easy to clean
- Brushless Induction motor with variable frequency drive
- Microprocessor controller with digital display
- Stable speed output even under unstable voltage conditions
- Smooth & soft start
- Low sample temperature rise
- Inverter fault detection with auto shutdown

Technical Data		
Models	R-8C BL	
Max. Speed	rpm	6000
Max. RCF	'g'	5070
Max. Capacity	ml	400
Digital timer range	Min	0-59
W x D x H	mm	380 x 470 x 300

Supply: 220-240 Volts 50 Hz Single Phase.

Rotor Heads Listing for R-8C / R-8C BL												
Models	Capacity	Max. Speed RPM	Max. RCF 'g'	Max. Speed RPM	Max. RCF 'g'	Models	Capacity	Max. Speed RPM	Max. RCF 'g'	Max. Speed RPM	Max. RCF 'g'	
		R-8C BL		R-8C				R-8C BL		R-8C		
Swing out Heads (with graduated glass tubes)						Angle Heads (with polypropylene tubes)						
R-81	16x15 ml	4500	3485	4000	2750	R-83	16x15 ml	5250	4280	5250	3600	
R-81 A	12x15 ml	4500	3485	4000	2750	R-83 A	12x15 ml	5250	4280	5250	3600	
R-81 B	8x15 ml	4500	3440	4200	3000	R-83 B	8x15 ml	6000	4700	5250	3600	
R-82	6x50 ml	4500	3530	4000	2800	R-84	6x50 ml	6000	4700	5250	3600	
R-82 A	4x50 ml	4500	3485	4000	2750	R-84 A	4x50 ml	6000	4700	5250	3600	
R-90 {with Bisafety cap}	4x100 ml	4000	2500	-	-	R-88	4x100 ml	6000	4550	-	-	
				-	-	R-89	24x15 ml	6000	5070	-	-	

Reduction Adaptors for R-8C / R-8C BL														
Models	Capacity	R-81	R-81A	R-81B	R-82	R-82A	R-83	R-83A	R-83B	R-84	R-84A	R-88	R-89	R-90
RA-151	1 x wintrob	✓	✓	✓	✗	✗	✓	✓	✓	✗	✗	✗	✗	✗
RA-152	1 x 3ml	✓	✓	✓	✗	✗	✓	✓	✓	✗	✗	✗	✓	✗
RA-153	1 x 5ml	✓	✓	✓	✗	✗	✓	✓	✓	✗	✗	✗	✓	✗
RA-154	1 x 8ml	✓	✓	✓	✗	✗	✓	✓	✓	✗	✗	✗	✓	✗
RA-155	1 x 4ml	✓	✓	✓	✗	✗	✓	✓	✓	✗	✗	✗	✓	✗
RA-156	1 x 6ml	✓	✓	✓	✗	✗	✓	✓	✓	✗	✗	✗	✓	✗
RA-157	1 x 50ml	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✓
RA-158	1 x 30ml	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✓
RA-160	1 x 15ml	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✓	✗	✗
RA-161	1 x 50ml	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✓	✗	✗
RA-166	3 x 15ml	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✓	✗	✓
RA-501	1 x 15 ml	✗	✗	✗	✗	✓	✓	✗	✗	✗	✓	✓	✗	✗
RA-502	1 x 30ml	✗	✗	✗	✗	✓	✓	✗	✗	✗	✓	✓	✗	✗
Suitable for Falcon Tubes (without tubes)														
RA-501F	1 x 15ml	✗	✗	✗	✗	✓	✓	✗	✗	✗	✓	✗	✗	✗
RA-160F	1 x 15ml	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✓	✗	✓
RA-161F	1 x 50ml	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✓	✗	✓
Suitable for Vacutainer Tubes (without tubes)														
RA-162	1 x upto 5ml (75 mm long)	✓	✓	✓	✗	✗	✗	✓	✗	✗	✗	✗	✗	✗
RA-163	1 x upto 6ml (100 mm long)	✓	✓	✓	✗	✗	✗	✓	✗	✗	✗	✗	✗	✗
RA-164	1 x upto 10 ml (100 mm long)	✗	✗	✗	✗	✓	✓	✗	✗	✓	✓	✗	✗	✗
RA-167	4 x upto 6ml (100 mm long)	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✓	✗	✓
RA-168	3 x upto 10 ml (100 mm long)	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✓	✗	✓

Rottors Heads Listing for RM-12C												
Models	Capacity					Max. Speed RPM			Max. RCF 'g'			
RM-1210	Micro Hematocrit Rotor for 24 Capillaries (75 x 1 mm)					12000			15300			
RM-1211	Micro Hematocrit Rotor for 12 capillaries (QBC -II Plus)					12000			15300			
RM-1212	Heparinized capillary tubes (75mm x 1 mm bore)											
RM-1213	Reading Device for RM-1210											
Angle heads												
RM-1214	10 X 2ml with Glass Tubes & reduction adaptors of 1ml & 0.5ml					16000			16600			
RM-1215	24 X 1.5ml with Tapered bottom Polypropylene tubes & reduction adaptors of 1ml & 0.4ml					11850			12715			
RM-1216	8 X 5ml with round bottom Polypropylene tubes & reduction adaptors of 4ml & 2ml					11850			12715			
RM-1217	4 strips of 8 X 0.2ml (PCR Strip Tubes)					12000			11910			

**ZERO  
COMPROMISE MODELS**

- BRUSHLESS
- ECONOMICAL





LCD Display



LED Display

Laboratory Centrifuges model R-8C Plus & R-8M Plus are suitable for routine sample analysis in Medical, Hospital, Pathology and heads and adaptors, those units are truly versatile.

Micro Centrifuges models R-12C Plus are ideal for growing routine application in biochemical and clinical labs, for Hematocrit, Corpuscle Percentage contents in blood, Serum analysis and precipitate separation etc.

#### Salient features :

- Automatic rotor identification, ensures operator safety
- Stainless Steel centrifuge Chamber, easy to clean
- Brushless Induction motor with variable frequency drive
- Microprocessor controller with digital display
- Stable speed output even under unstable voltage conditions
- Smooth & soft start
- Low sample temperature rise
- Inverter fault detection with auto shutdown
- 7 segment LED display of speed (R-8C Plus/R-12C Plus)
- Alphanumeric LCD display of speed & RCF (R-8M Plus)
- Selection of 3 acceleration & deceleration profiles (R-8M Plus)
- Digital countdown timer & continuous run

- Safety lid interlock to prevent lid opening during centrifugation
- Imbalance detection & centrifugation stop with display of error
- Dynamic brake for quick deceleration
- Motor overload protection
- Gas hinge to prevent door falling
- Emergency lid lock release
- Last set parameters recall (Useful for repetitive analysis)
- Wide variety of rotors & reduction adaptors

Technical Data			
Models		R-8C Plus R-8M Plus	R-12C Plus
Max. Speed	rpm	6000	16000
Max. RCF	'g'	5070	21000
Max. Capacity	ml	400	40
Digital timer range	Min	0-99	0-99
Noise		≤ 60 dB	≤ 60 dB
WxDxH	mm	380x470x300	380x470x300

Supply: 220-240 Volts 50 Hz Single Phase.

**Nomenclature method of Rotors & accessories**

Alphabets in beginning	Numbers in middle
A= Fixed angle rotor	1st numerical = Quantity per insert
S= Swing out rotor	2nd numerical = Tube capacity (ml)
B= Bucket	
RA= Reduction adaptor	
<b>Examples</b>	
S 4-100	(Swing out rotor, 4 tubes of 100ml capacity)
A 24-15	(Angle rotor, 32 tubes of 15ml capacity)
B 9-5	(Bucket, 9 tubes of 5ml capacity)
RA-161F	(Reduction adaptor for falcon)

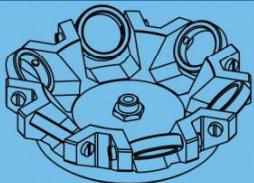
Swingout Rotors (except S 4-100) & Angle Rotors are supplied with suitable SS tubes as carriers

Model Rotor	R-8M Plus/R-8C Plus	R-12C Plus
S 8-15	Yes	
S 6-50	Yes	
S 4-100	Yes	
S 24-15	Yes	
A 6-50	Yes	
A 4-100	Yes	
A 24-15	Yes	
AR 24-75 HE		Yes
AR 12-75 HE		Yes
AR 12-2		Yes
AR 24-2		Yes
AR 8-5		Yes
P 4-8		Yes

**Swing Out Rotors for R-8C Plus & R-8M Plus**

Metal Buckets suitable for Swing Out Rotor S 4-100									
Image of Tube	B 100				B 9-5				
Image of Tube									
Tube Capacity (ml)	100	50	50	30	15	15	10	6	5
Type of Tube	Glass	Glass	Falcon®	Glass	Glass	Falcon®	Vacutainer®	Vacutainer®	Vacutainer® short
Ø x L (mm)	45.5 x 104	30 x 110	29 x 116	24 x 110	17 x 110	16.5 x 120	15.5 x 106	12.5 x 106	12.5 x 81
Bucket No.	B 100	B 100	B 100	B 100	B 100	B 100	B 100	B 100	B 9-5
Insert Cat No.	–	RA 157	RA 161F	RA 158	RA 166	RA 160F	RA 168	RA 167	–
Tubes supplied	Yes	Yes	No	Yes	Yes	No	No	No	No
No of tubes/Insert	1	1	1	1	3	1	3	4	9
No of tubes/rotor	4	4	4	4	12	4	12	16	36

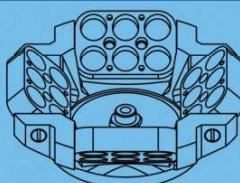
Swing Out Rotor S 8-15 Max. Speed RPM 4500 Max RCF (g) 3440 	Image of Tube								
	Tube Capacity (ml)	15	13	8	6	5	5	3	
	Type of Tube	Glass	Borosil Glass	Glass	Vacutainer®	Glass	Vacutainer® short	Glass	
	Ø x L (mm)	17 x 110	15 x 125	12 x 100	12.5 x 106	12 x 75	12.5 x 81	10 x 75	
	Insert Cat No.	–	–	RA 154	RA 163	RA 153	RA 162	RA 152	
	Tubes supplied	Yes	No	Yes	No	Yes	No	Yes	
	No of tubes/Insert	1	1	1	1	1	1	1	
	No of tubes/rotor	8	8	8	8	8	8	8	

**Swing Out Rotor S 6-50**

Max. Speed RPM 4500

Max RCF (g) 3530

Image of Tube					
Tube Capacity (ml)	50	30	15	15	10
Type of Tube	Glass	Glass	Falcon®	Glass	Vacutainer®
Ø x L (mm)	30 x 110	24 x 110	16.5 x 120	17 x 110	15.5 x 106
Insert Cat No.	–	RA 502	RA 501F	RA 501	RA 164
Tubes supplied	Yes	Yes	No	Yes	No
No of tubes/Insert	1	1	1	1	1
No of tubes/rotor	6	6	6	6	6

**Swing Out Rotor S 24-15**

Max. Speed RPM 4500

Max RCF (g) 3330

Image of Tube						
15	8	6	5	5	3	
Glass	Glass	Vacutainer®	Glass	Vacutainer® short	Glass	
17 x 110	12 x 100	12.5 x 106	12 x 75	12.5 x 81	10 x 75	
–	RA 154	RA 163	RA 153	RA 162	RA 152	
Yes	Yes	No	Yes	No	Yes	
1	1	1	1	1	1	
24	24	24	24	24	24	

**Angle Rotors for R-8C Plus & R-8M Plus****Angle Rotor A 4-100**

Max. Speed RPM 6000

Max RCF (g) 4550

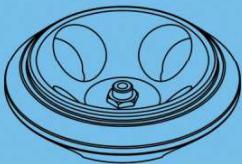


Image of Tube								
Tube Capacity (ml)	100	50	50	15	15	15	10	6
Type of Tube	Plastic	Falcon®	Glass	Glass	Glass	Falcon®	Vacutainer®	Vacutainer®
Ø x L (mm)	45.5 x 104	29 x 116	30 x 110	17 x 110	17 x 110	16.5 x 120	15.5 x 106	12.5 x 106
Insert Cat No.	–	RA 161F	RA 161	RA 160	RA 166	RA 160F	RA 168	RA 167
Tubes supplied	Yes	No	Yes	Yes	Yes	No	No	No
No of tubes/Insert	1	1	1	1	3	1	3	4
No of tubes/rotor	4	4	4	4	12	4	12	16

**Angle Rotor AR 6-50**

Max. Speed RPM 6000

Max RCF (g) 4700



Image of Tube						
Tube Capacity (ml)	50	30	15	15	10	
Type of Tube	Plastic	Glass	Glass	Falcon®	Vacutainer®	
Ø x L (mm)	30 x 100	24 x 110	17 x 110	16.5 x 120	15.5 x 106	
Insert Cat No.	–	RA 502	RA 501	RA 501F	RA 164	
Tubes supplied	Yes	Yes	Yes	No	No	
No of tubes/Insert	1	1	1	1	1	
No of tubes/rotor	6	6	6	6	6	

**Angle Rotor A 24-15**

Max. Speed RPM 6000

Max RCF (g) 5070

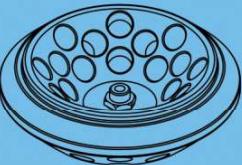


Image of Tube						
Tube Capacity (ml)	15	8	6	5	5	3
Type of Tube	Plastic	Glass	Vacutainer®	Glass	Vacutainer® short	Glass
Ø x L (mm)	17 x 102	24 x 100	12.5 x 106	12 x 75	12.5 x 81	10 x 75
Insert Cat No.	–	RA 154	RA 163	RA 153	RA 162	RA 152
Tubes supplied	Yes	Yes	No	Yes	No	Yes
No of tubes/Insert	1	1	1	1	1	1
No of tubes/rotor	24	24	24	24	24	24

## Rotors for R-12C Plus

<b>Angle Rotor AR 12-2</b> Max speed RPM 16000 Max RCF (g) 16140	Image of Tube				
	Tube Capacity (ml)	2	1	0.5	0.2
	Type of Tube	Micro	Micro	Micro	Micro
	Insert Cat No.	No	RE 2-1	RE 2-05	RE 2-02
	No of tubes/insert	1	1	1	1
	No of tubes/rotors	12	12	12	12
	Ø x L (mm)	11 x 46	7.5 x 49	7.5 x 31	6 x 22
Tubes supplied					
No					

(Rotor supplied with all suitable inserts)

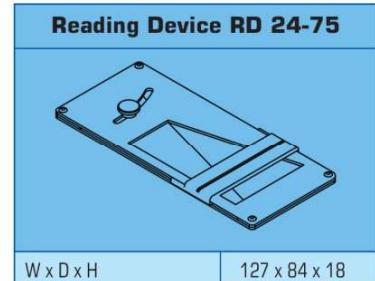
<b>Angle Rotor AR 24-2</b> Max speed RPM 15000 Max RCF (g) 21000	Image of Tube				
	Tube Capacity (ml)	1.5	1	0.4	
	Type of Tube	Micro	Micro	Micro	
	Insert Cat No.	No	RE 2-1	RE 2-04	
	No of tubes/insert	1	1	1	
	No of tubes/rotors	12	12	12	
	Ø x L (mm)	10.5 x 42	7.5 x 49	5.5 x 50	
Tubes supplied					
No					

(Rotor supplied with all suitable inserts)

<b>Angle Rotor AR 8-5</b> Max speed RPM 11850 Max RCF (g) 13500	Image of Tube				
	Tube Capacity (ml)	5	4	2	
	Type of Tube	Micro	Micro	Micro	
	Insert Cat No.	No	RE 5-4	RE 5-2	
	No of tubes/insert	1	1	1	
	No of tubes/rotors	8	8	8	
	Ø x L (mm)	16 x 59	10 x 75	10 x 47	
Tubes supplied					
No					

(Rotor supplied with all suitable inserts)

Image of Angle Rotors			
Model	AR 24-75 HE	AR 12-75 HE	P 4-8
Max speed RPM	12000	12000	15000
Max RCF (g)	15300	15300	21000
Image of Tube			
Tube Capacity (ml)	1		4 strips of 8 PCR
Type of Tube	Capillary	Capillary QBC-II Plus	PCR
No of tubes/rotors	24	12	4
Ø x L (mm)	1 x 75		6 x 78
Tubes supplied	Yes	No	No



W x D x H      127 x 84 x 18



### **Microprocessor Research Centrifuges**

Compufruges model PR - 23 & PR - 24 are Microprocessor controlled centrifuges used in auxiliary laboratories in industry, Educational & Research institutions, Bio Technology, Medical Laboratories, Hospitals, Blood Banks, Pharmaceutical laboratories and agriculture soil testing for determination of moisture equivalent of soil. It is also suitable for determination of settlement of paints, pastes, cosmetics and food products. Centrifuge rotors & carriers are also suitable for use with variety of Falcon & Vacutainer tubes.

PR - 23 & PR - 24 have soft touch keypads for fast and accurate setting of run parameters. Basic runs are easy with setting of speed, time, temperature, brake. Press 'start' key and Compufruge does the rest for you.

Brushless induction motor with frequency drive & unique automatic rotor identification ensures accurate speed setting for individual rotors. Over current overheating safety cutoff circuit is provided for motor protection. Safety lid interlock on the centrifuge ensures that the rotor does not run with LID open while the LID cannot be opened unless rotor comes to complete halt.

### **Salient Features :**

- User friendly microprocessor control with LED display
- Menu driven ten programme memory
- Choice of high brake, low brake and coasting
- Imbalance detector with Auto cutoff
- Safety lid interlock to prevent cover opening during centrifugation
- Automatic unique safety rotor identification system
- Speed holding accuracy 100 RPM
- Self-diagnosis for errors

### **Revolutionary Research Centrifuges**

R - 23 & R 24 centrifuges are widely used in auxiliary laboratories in industry, Educational & Research institutions, Bio Technology, Medical Laboratories, Hospitals, Blood Banks, Pharmaceutical laboratories, Agriculture & Soil testing for determination of moisture equivalent of soil. It is also suitable for determination of settlement of paints, pastes, cosmetics and food products. Centrifuge rotors & carriers are also suitable for use with variety of Falcon & Vacutainer Tubes.

### **Salient Features :**

- Stepless speed regulator with zero start interlock
- Digital speed indicator
- Dynamic brake
- 0-99 minutes digital count down timer
- Imbalance detector with cutoff
- Safety lid interlock to prevent cover opening during centrifugation

Technical Data				
Models		R-23	R-24	PR-23
Max. Speed	rpm	6900	17300	7000
Max. RCF	'g'	7350	27440	7560
Max. Tube size	ml	200	100	250
Max. Capacity	ml	1200	400	1200
W x D x H	mm	400 x 500 x 455		400 x 500 x 440

Supply: 220 - 240 Volts 50 Hz Single Phase.

Rotor Heads Listing For R - 23 & PR - 23							
Models	Capacity	Type of Rotor	Type of Container	R-23		PR-23	
				Speed (RPM)	RCF 'g'	Speed (RPM)	RCF 'g'
R-230 + R-231	4 X 200 ml	SWING OUT	GLASS	4800	4000	5100	4500
R-230B + R-233B	108 X 5ml (RIA)	SWING OUT	RIA PLASTIC TUBES	5000	3830	5100	3980
R-234	4 X 250ml	SWING OUT	PLASTIC	X	X	5500	5070
R-235	8 X Microtiter	SWING OUT	96 WELL	X	X	3200	1470
R-230A	2 X Microtiter	SWING OUT	96 WELL	3200	1470	3200	1470
R-236	6 X 200ml	ANGULAR	PLASTIC	6900	7350	7000	7560
R-237	8 X 100ml	ANGULAR	PLASTIC	6900	6700	7000	6900
R-238	12 X 50ml	ANGULAR	PLASTIC	6900	6970	7000	7450
R-239	36 X 15ml	ANGULAR	PLASTIC	6900	7240	7000	7340
Angle Heads suitable for Falcon tubes (without Tubes)							
R-238F	12 X 50ml	ANGULAR	FALCON	6900	6970	7000	7450
R-239F	24 X 15ml	ANGULAR	FALCON	6900	7240	7000	7340

Reduction Adaptors For Swing Out Head (R-230 + R-231)			
Suitable for Glass Tubes (with tubes)			
Models	Tube Capacity	No. of Tubes Per Adaptor	Total No. of Tubes
RA-2311	100ml	1	4
RA-2312	50ml	1	4
RA-2313	30ml	3	12
RA-2314	15ml	7	28
Suitable for Vacutainer Tubes (without tubes)			
RA-2315	Up to 4ml (100mm long)	6	24
RA-2316	Up to 10ml (100mm long)	5	20
RA-2317	Up to 5ml (75mm long)	6	24

Reduction Adaptors for Swing Out Head (R-234 )			
Suitable for Glass Tubes (with tubes)			
Models	Tube Capacity	No. of tubes per Adaptor	Total no. of Tubes
RA-2341	50 ml	1	4
RA-2342	25 ml	3	12
RA-2343	15 ml	5	20
RA-2344	5 ml	13	52

Rotor Heads Listing For R-24 & PR-24							
Models	Capacity	Type of Rotor	Type of Container	R-24		PR-24	
				Speed (RPM)	RCF 'g'	Speed (RPM)	RCF 'g'
R-246A	4 X 25 ml	SWING OUT	GLASS	9300	8700	11000	12180
R-241	4 X 100 ml	ANGULAR	PLASTIC	11000	14050	14500	23980
R-242	6 X 50 ml	ANGULAR	PLASTIC	12100	14240	16000	25180
R-243	8 X 25 ml	ANGULAR	PLASTIC	12500	14500	14500	20220
R-244	12 X 15 ml	ANGULAR	PLASTIC	12300	14710	16000	24600
R-243A	6 X 25 ml	ANGULAR	PLASTIC	14100	17120	18000	28980
R-244A	8 X 15 ml	ANGULAR	PLASTIC	15400	20150	18000	27530
R-247	8 X 50 ml	ANGULAR	PLASTIC	10800	13430	14500	24680
R-248	24 X 1.5 ml	ANGULAR	PLASTIC	17300	27440	20000	37570
R-249	6strips of 8 X 0.2 ml	ANGULAR	PCR STRIP TUBES	11000	12180	11000	12180
Angle Heads suitable for Falcon tubes (without Tubes)							
R-244F	12 X 15ml	ANGULAR	FALCON	11000	14610	11000	14610
R-247F	8 X 50ml	ANGULAR	FALCON	11000	14610	11000	14610

# Compact Cooling Centrifuges

## Cooling Micro Centrifuges



# Compact Cooling Centrifuges

## Cooling Micro Centrifuges

These newly developed compact bench top Cooling Centrifuges models CM-8 Plus and CM-12 Plus offers quiet operation with very small footprint.

Centrifuge model CM-8 Plus is suitable for routine sample analysis in Medical, Hospital, Pathology and Institutional laboratories. With a wide choice of rotor heads and adaptors, this unit is truly versatile.

Micro Centrifuge model CM-12 Plus is useful for routine applications in bio-technology, PCR, life sciences, biochemical and clinical labs etc. This unit is ideal for centrifugation with micro tubes from 0.2 ml upto 1.5 ml.

### Salient Features :

- Stable speed output
- High Capacity (CM-8 Plus)
- High Speed (CM-12 Plus)
- Wide variety of rotors & reduction adaptors
- Precise temperature control up to -8°C
- Pre-cooling feature
- Fast spin feature
- Calibration window on lid for speed (rpm)
- Brushless Induction motor with variable frequency drive ensures gentle start
- Microprocessor based unit with alpha numeric LCD display
- Self-diagnosis of errors
- Parameters setting through easy to use bi-directional encoder
- Inverter fault detection with auto shutdown
- CFC free refrigeration system
- 24 programme memory
- 3 Accelerations, 4 Deceleration profiles
- Choice of rpm / rcf setting & display
- Operating panel with feather touch keys
- Digital countdown timer 0-99 minutes & continuous run
- Last set parameters recall (Useful for repetitive analysis)
- Automatic Rotor identification
- Safety lid interlock to prevent lid opening during centrifugation
- Imbalance detection & centrifugation stop with display of error
- Motor overload protection
- Gas hinge to prevent falling of door
- Emergency lid lock release

Technical Data		
Models	CM-8 Plus	CM-12 Plus
Max. Speed (rpm)	6000	16000
Max. RCF (g)	5070	16600
Max. Tube Size (ml)	100	5
Max. Capacity (ml)	400	40
*Min. Temperature (°C)	-8	-8
#Noise	≤ 60 dB	≤ 60 dB
Dimensions WxDxH (mm)	480 x 585 x 530	
Voltage Stabilizers	VS - 02	VS - 02

Supply: 220-240 Volts, 50 Hz Single Phase.

\* Note : Depending on capacity, type of rotor centrifugation speed, ambient temperatures and other process parameters.

# Note : Measured as per standard protocol

Rotors for CM-8 Plus				
Models	Capacity	Type of Container	MAX. RPM	MAX. RCF
<b>Swing Out Rotors</b>				
R-90 M	4 x 100 ml	Glass Tubes with Bio-safety Caps	4000	2500
R-81 M	16 X 15 ml	Glass Tubes	4500	3485
R-81B M	8 X 15 ml	Glass Tubes	4500	3485
R-82 AM	4 X 50 ml	Glass Tubes	4500	3485
<b>Angle Rotors</b>				
Models	Capacity	Type of Container	MAX. RPM	MAX. RCF
R-83 BM	8 x 15ml	Polypropylene tubes	6000	4700
R-89 M	24 x 15ml	Polypropylene tubes	6000	5070
R-84 M	6 x 50ml	Polypropylene tubes	6000	4700
R-88 M	4 x 100ml	Polypropylene tubes	6000	4550

Angle Rotors for CM-12 Plus				
Models	Capacity	Type of Container	MAX. RPM	MAX. RCF
RM-1214 M	10 x 2ml	Glass tubes	16000	16600
RM-1215 M	24 x 1.5ml	Polypropylene tubes	11850	12715
RM-1216 M	8 x 5ml	Polypropylene tubes	11850	13500
RM-1217 M	4 x 8 PCR Strips of 0.2ml	Polypropylene tubes	12000	11910

# Compact Cooling Centrifuges

## Cooling Micro Centrifuges

Reduction Adaptors for CM-8 Plus									
Models	Capacity	R-81 M	R-81 BM	R-82 AM	R-83 BM	R-84 M	R-88 M	R-89 M	R-90 M
RA-151	1 x wintrob	✓	✓	X	✓	X	X	X	X
RA-152	1 x 3ml	✓	✓	X	✓	X	X	✓	X
RA-153	1 x 5ml	✓	✓	X	✓	X	X	✓	X
RA-154	1 x 8ml	✓	✓	X	✓	X	X	✓	X
RA-155	1 x 4ml	✓	✓	X	✓	X	X	✓	X
RA-156	1 x 6ml	✓	✓	X	✓	X	X	✓	X
RA-157	1 x 50ml	X	X	X	X	X	X	X	✓
RA-158	1 x 30ml	X	X	X	X	X	X	X	✓
RA-160	1 x 15ml	X	X	X	X	X	✓	X	X
RA-161	1 x 50ml	X	X	X	X	X	✓	X	X
RA-166	3 x 15ml	X	X	X	X	X	✓	X	✓
RA-501	1 x 15 ml	X	X	✓	X	✓	X	X	X
RA-502	1 x 30ml	X	X	✓	X	✓	X	X	X
Suitable for Falcon Tubes (without tubes)									
RA-501F	1 x 15ml	X	X	✓	X	✓	X	X	X
RA-160F	1 x 15ml	X	X	X	X	X	✓	X	✓
RA-161F	1 x 50ml	X	X	X	X	X	✓	X	✓
Suitable for Vacutainer Tubes (without tub)									
RA-162	1 x upto 5ml (75 mm long)	✓	✓	X	X	X	X	X	X
RA-163	1 x upto 6ml (100 mm long)	✓	✓	X	X	X	X	X	X
RA-164	1 x upto 10ml (100 mm long)	X	X	✓	X	✓	X	X	X
RA-167	4 x upto 6ml (100 mm long)	X	X	X	X	X	✓	X	✓
RA-168	33 x upto 10ml (100 mm long)	X	X	X	X	X	✓	X	✓



**RM-1217 M**  
(4 x 8 PCR Strips of 0.2ml)



**RM-1215 M**  
(24 x 1.5ml)



**R-90 M**  
(4 x 100 ml with Bio-safety Caps)



**R-81 M**  
(16 X 15 ml)

Specifications subject to change without notice



These Plus series Refrigerated Centrifuges are designed for centrifugation of temperature sensitive material and find application in routine and research work in auxiliary laboratories in industry, Educational & Research institutions, Bio Technology, Medical Laboratories, Hospitals, Blood Banks, Pharmaceutical & Clinical research laboratories.

All the centrifuges have rust proof, easy to clean Stainless Steel centrifuge inner chamber with steel guard. A wide variety of swing out and angle rotors

with a choice of reduction adaptors make these units truly versatile.

Users can select models as per their requirements from high volume low speed Centrifuges (C-23 Plus, CPR-23 Plus), low volume high speed centrifuges (C-24 Plus, CPR-24 Plus) in table top design & compact high-speed high volume (C-30 Plus, CPR-30 Plus) floor standing centrifuges.

	Table Top Models				Floor Models	
	High Volume Low Speed		Low Volume High Speed		High Volume High Speed	
	C-23 Plus	CPR-23 Plus	C-24 Plus	CPR-24 Plus	C-30 Plus	CPR-30 Plus
Programable compensation for true sample temperature	X	✓	X	✓	X	✓
Pre cooling	X	✓	X	✓	X	✓
Acceleration Profiles	low, high	9	low, high	9	low, high	9
Deceleration Profiles	Coasting, low, high	9 & Coasting	Coasting, low, high	9 & Coasting	Coasting, low, high	9 & Coasting
Fast Spin	X	✓	X	✓	X	✓
Calibration window on lid for speed	✓	✓	✓	✓	✓	✓
Display	LED	LCD	LED	LCD	LED	LCD
Control Communication	Digital	Digital	Digital	Digital	Digital	Digital
Self-Diagnostics of errors	X	✓	X	✓	X	✓
Parameters setting switches	Feather touch keys	Bi-directional encoder	Feather touch keys	Bi-directional encoder	Feather touch keys	Bi-directional encoder
Brushless motor with frequency drive	✓	✓	✓	✓	✓	✓
Inverter fault detection with auto shut down	✓	✓	✓	✓	✓	✓
CFC free refrigeration system	✓	✓	✓	✓	✓	✓
No. of Programs	X	99	X	99	X	99
Last set parameters recall	✓	✓	✓	✓	✓	✓
Choice of rpm / rcf setting	RPM	RPM / RCF	RPM	RPM / RCF	RPM	RPM / RCF
Temperature display	°C	°C / °F	°C	°C / °F	°C	°C / °F
Digital countdown timer 0-99 min & Continuous run	✓	✓	✓	✓	✓	✓
Log of cumulative run time	X	✓	X	✓	X	✓
User defined program name	X	for 5 programs	X	for 5 programs	X	for 5 programs
Automatic door opening	✓	✓	✓	✓	✓	✓
Automatic Rotor Identification	✓	✓	✓	✓	✓	✓
Motor overload protection	✓	✓	✓	✓	✓	✓
Emergency lid lock release	✓	✓	✓	✓	✓	✓
Imbalance detection with centrifugation cut off	✓	✓	✓	✓	✓	✓
Password protection	X	✓	X	✓	X	✓
Gas Hinge to prevent door falling	✓	✓	✓	✓	✓	✓

Technical Data				
Models		C-23 Plus CPR-23 Plus	C-24 Plus CPR-24 Plus	C-30 Plus CPR-30 Plus
Max. Speed	rpm	7000	20000	20000
Max. RCF	g'	7400	37570	37570
Max. Tube Size	ml	250	100	250
Max. Capacity	ml	1200	400	1200
Lowest Temp.*	°C	- 8	- 8	- 8
#Noise		≤ 60 dB	≤ 60 dB	≤ 60 dB
W x D x H	mm	830 x 650 x 500	775 x 575 x 475	660 x 765 x 945
Voltage Stabilizer	model	VS-03	VS-03	VS-03

Supply: 220-240 Volts, 50 Hz Single Phase.

# Note : Measured as per standard protocol

\*Note : Depending on capacity, type of rotor, centrifugation speed, ambient temperatures and other process parameters.

Rotor Heads Listing								
Models	Capacity	Container	C-23 Plus CPR-23 Plus		C-24 Plus CPR-24 Plus		C-30 Plus CPR-30 Plus	
			Speed (rpm)	RCF 'g'	Speed (rpm)	RCF 'g'	Speed (rpm)	RCF 'g'
Swing out Heads (with graduated glass tubes)								
R-230 M + R-231 M	4 x 200 ML	GLASS	5100	4500	X	X	4500	3500
R-234 M	4 x 250 ML	PLASTIC	5500	5070	X	X	4500	3500
R-235 M	8 X MICROTITOR	96 WELL	3200	1470	X	X	3200	1470
R-230 BM+ R-233 BM	108 x 5ML (RIA)	RIA PLASTIC TUBES	5100	3980	X	X	4500	3500
R-240 M	16 x 50 ML	FALCON®	X	X	X	X	3200	1775
R-240 AM	32 x 15 ML	FALCON®	X	X	X	X	3200	1775
R-246 AM	4 x 25 ML	GLASS	X	X	11000	12180	11000	12180
Angle heads (with Polypropylene / Polycarbonate tubes)								
R-236 M	6 x 200 ML	PLASTIC	7000	7400	X	X	7000	7400
R-237 M	8 x 100 ML	PLASTIC	7000	7400	X	X	7000	7400
R-238 M	12 x 50 ML	PLASTIC	7000	7400	X	X	7000	7400
R-239 M	36 x 15 ML	PLASTIC	7000	7400	X	X	7000	7400
R-241 M	4 x 100 ML	PLASTIC	X	X	14500	23980	14500	23980
R-243 M	8 x 25 ML	PLASTIC	X	X	18000	31150	18000	31150
R-244 M	12 x 15 ML	PLASTIC	X	X	18000	31150	18000	31150
R-247 M	8 x 50 ML	PLASTIC	X	X	16000	30020	16000	30020
R-248 M	24 x 1.5 ML	PLASTIC	X	X	20000	37570	20000	37570
R-249 M	6 strips of 8 x 0.2 ml	PLASTIC	X	X	11000	12180	11000	12180
Angle heads suitable for Falcon Tubes (without tubes)								
R-238 MF	12 x 50 ML	FALCON	7000	7400	X	X	7000	7400
R-239 MF	24 x 15 ML	FALCON	7000	7400	X	X	7000	7400
R-244MF	12 x 15 ML	FALCON	X	X	11000	14610	11000	14610
R-247MF	8 x 50 ML	FALCON	X	X	11000	14610	11000	14610

Reduction Adaptors for Swing Out Head Model R-230 M + R-231 M			
Suitable for Glass Tubes (with tubes)			
Models	Tube Capacity	No. of tubes per Adaptor	Total No. of Tubes
RA-2311	100 ml	1	4
RA-2312	50 ml	1	4
RA-2313	30 ml	3	12
RA-2314	15 ml	7	28
Suitable for Vacutainer Tubes (without tubes)			
Models	Tube Capacity	No. of tubes per Adaptor	Total No. of Tubes
RA-2315	Upto 4 ml (100 mm long)	6	24
RA-2316	Upto 10ml (100 mm long)	5	20
RA-2317	Upto 5ml (75 mm long)	6	24



**R-249 M**  
**(6 strips of 8 x 0.2ml)**

Reduction Adaptors for Swing Out Head Model R-234 M			
Suitable for Glass Tubes (with tubes)			
Models	Tube Capacity	No. of tubes per Adaptor	Total No. of Tubes
RA-2341	50 ml	1	4
RA-2342	25 ml	3	12
RA-2343	15 ml	5	20
RA-2344	5 ml	13	52



**R-248 M**  
**(24 x 1.5ml)**



**R-230 M + R-231 M**  
**(4 X 200 ml)**



**R-235 M**  
**(8 x MICROTITR)**



**R-247 M**  
**(8 x 50 ml)**



KPR -70 Plus is a new generation Centrifuge with built in system for storage of centrifugation data. These Centrifuges are used in clinical laboratories, pharmaceutical industries, research laboratories, general biochemical work etc.

Advance manufacturing techniques are used for mounting of new Brushless induction drive motor resulting in low level of vibration and noise with smooth acceleration / deceleration. The durable high capacity refrigeration system maintains precise operating temperature.

### Micropocessor Controller

KPR - 70 Plus has user-friendly controls that make setup & Operation mode simple like Setting of RPM or RCF, Temperature, Timer, Acceleration, Deceleration etc. Soft touch keypad with large LCD display panel is located at the front.

KPR 70 plus stores & recalls up to 51 programs that can be programmed. User friendly microprocessor controller allows interactive menu driven

programming & keeps the operator continuously informed of the centrifuge operation status.

Unique facility for setting and controlling the centrifuge run either by rpm (speed) or RCF (g force), eliminating the need of calculations & can set timer from 1 minute to 99 minutes & also has 9 Acceleration & 10 Deceleration profiles for smooth & jerk free run for optimum yield under different applications.

### Data Acquisition System

KPR-70 Plus has a built in system to collect all data of the centrifugation process. The data from the centrifuge transferred to Personal Computer using a data interface like Operator code, process type, Time, Temp., RPM, RCF, Acceleration, Deceleration & Status of the process etc. can be acquired.

### Salient Features :

- Menu driven 51 program memory
- Programmable centrifugation parameters for accurate control
- Tamper proof memory with key lock
- Lid closing & opening with the help of Gas Hinges.
- Safety lid-interlock to prevent LID opening during centrifugation
- Unbalance cut-off with indication
- Simultaneous display of set & run parameters

Technical Data		
Models		KPR-70 PLUS
Max. Speed	rpm	4400
Max. rcf	'g'	5230
W X D X H	mm	805 X 905 X 960
Lowest Temp.	°C	0
Connected load	KVA	6
Voltage Stabilizer	Model	VS-06

Supply: 220-240 Volts 50 Hz Single Phase.

### Rotors Heads Listing

Models	Description	KPR-70 PLUS	
		Speed (rpm)	RCF 'g'
K-731	6 place wind shield swing out rotor with a set of 6 metal carriers each with capacity of 1000 ml. suitable for bottles with 1000 ml polypropylene bottles.	4200	5230
<b>Angle Rotors</b>			
K-905	Angle rotor 6 x 500 ml with polypropylene bottles.	4400	3780
K-906	Angle rotor 8 x 250 ml with polypropylene tubes.	4400	3700
K-907	Angle rotor 12 x 100 ml with polypropylene tubes.	4400	3520
K-908	Angle rotor 16 x 50 ml with polypropylene tubes.	4400	3570
K-909	Angle rotor 36 x 25 ml with polypropylene tubes.	4400	3610
K-910	Angle rotor 72 x 15 ml with polypropylene tubes.	4400	3630

# Microplate Shaker



MPS 1

Technical Data	
Specifications	Microplate Shaker
Speed setting	300 to 1800 RPM
Orbital diameter	2 mm
Motor type	Brushless DC motor
Timer setting	Up to 99 mins + infinite mode
Display	Digital display of LED Speed & Time
Power supply	Universal (100 to 230V. 50/60 Hz)
Dimensions (W x D x H)	127 x 85 x 86 mm
Weight	1.4 Kg
Standard attachments	1) 20 x 1.5/2.0 ml Microtubes (foam) 2) Replaceable clamps to use different types of standard micro plates

Supply: 220-240 Volts, 50 Hz Single Phase.

The Digital Microplate Shaker is an essential instrument for mixing individual micro plates of different type

## Salient Features :

- Tiny footprint-as small as the plate itself
- Digital Display with Speed & Time setting
- Speed selection from 300 to 1800 RPM
- Maintenance free BLDC motor
- Orbital Diameter of 2 mm for thorough mixing, microprocessor controlled for high accuracy
- Silent & stable operation
- Timer setting of to 99 min & Continuous mode
- A Special turn down toggle clamp for spill proof & simple side in/side out for loading / unloading of microplate
- Universal fit-comes with interchangeable clamps for different micro plates (Tool free and easy clamp change procedure)
- Even mixing in all wells across the plate
- Comes With attachment for 20 x 1.5/2ml microtubes
- Can be used inside fume hoods / cold rooms

# Tube Roller Mixer

SeroRoll-6 is specially designed to achieve uniform consistency in serological samples, eventually helps in increasing the sensitivity of the planned testing.

Rolling bed of SeroRoll-6 is designed to mix all size samples in blood sample tubes, falcon tubes, culture bottles, etc.

## Salient Features :

- Gentle ROCKING and ROLLING system for optimum mixing
- Suitable for mixing blood sample and viscous substance
- Brushless DC motor for quiet operation and maintenance free long life
- Removable rollers for proper cleaning
- Adjustable roller rod spacing to hold different diameter tubes
- Adjustable speed ranging from 10 to 100 RPM
- Adjustable timer ranging from 0 min to 99 mins and infinite
- Pulse mode
- Error indication for overloading of samples



Seroroll-6

Technical Data	
Specifications	Seroroll-6
Motor Type	BLDC motor
Motion	Rocking and rolling
Max. Loading capacity	2 Kg
Number of tubes	15 x 7 ml Blood Tubes
Roller size	30 x 327 mm
Speed range	10 to 100 RPM
Timer range	0 to 99min.
Operation type	Continuous and timed operation
Tilt angle	3°
Dimensions (W x D x H) mm	496 x 107 x 292

Supply: 220-240 Volts, 50 Hz Single Phase.

## Mini Rotary Shakers



RS-12 Plus

RS-12R

For gentle mixing of fluids in test tubes & glass vessels of different capacities. These shakers find applications in pathology, microbiology, chemistry, molecular biology & biotechnology.

Model **RS-12 Plus / RS-18 Plus** shakers have Brush less DC (BLDC) Motor having a wide speed range upto 400 rpm. A universal platform is with adjustable rollers and is also suitable to accommodate interchangeable clamps of assorted sizes / capacities for holding conical flasks, making the unit truly versatile in performance. A variety of clamps are available having capacity of 500 ml, 250 ml, 150 ml and 100/ 50 ml (**To be ordered separately**)

Model **RS-12R** shakers are with AC/DC Universal motor with maximum speed of 180 rpm & with in built speed regulator. These shakers have platform with 3 adjustable rollers.

## Technical Data

Model		RS-12 R	RS-12 Plus	RS-18 Plus
Speed Range	rpm	80 to 180	50 to 400	50 to 250
Platform Size	inches	7 x 11	12 x 12	20 x 20
Flasks Capacity (max)		-	5 x 500 ml	13 x 500 ml
Overall Dimensions	W x D x H (mm)	270 x 260 x 156	320 x 415 x 130	520 x 613 x 155
Speed Indicator		Digital	Digital	Digital
Digital Count down Timer	minutes	15	99	99
Shaking Orbit	mm	10	10	10

Supply: 220-240 Volts, 50 Hz Single Phase.

## Rotary Shakers



RS - 36 BL

These Shakers are ideal for mixing and development of cultures, chemicals, solvents, and assays etc. in Microbiological, Cell Culture & Life Science laboratories.

Brushless Induction drive motor with frequency drive makes the unit suitable for continuous non-

stop operation. Step less electronic frequency control ensures gentle start and maintains preset speed. Compact counter balanced drive mechanism ensures high stability and reliability even in continuous operation & uneven load distribution.

## Salient Features :

- Variable speed from 20 RPM to 300 RPM
- Digital display of speed with presetting facility
- Shaking amplitude 40 mm
- Universal Platform to accommodate interchangeable clamps of assorted sizes for different capacity of flasks
- Automatic restart at preset speed in case of power failure

## Technical Data

Models	Platform Size	Max. Volume	Max. No. of clamps (To be ordered separately)					
			2000 ml.	1000 ml.	500 ml.	250 ml.	150 ml.	100ml/ 50ml
RS-36 BL	36" x 36"	18 Litres	9	16	25	36	49	64

Supply: 220-240 Volts, 50 Hz Single Phase.

WORLD CLASS  
PREMIUM RANGE



### RS - 24 Plus

These Shakers are ideal for mixing and development of cultures, chemicals, solvents, and assays etc. in Microbiological, Cell Culture & Life Science laboratories.

The Unit has base assembly fabricated from heavy mild steel sections. Brushless Induction drive motor with frequency drive makes the unit suitable for continuous non-stop operation. Step less electronic frequency control ensures gentle start and maintains preset speed. Compact counter balanced drive mechanism ensures high stability and reliability even in continuous operation & uneven load distribution.

#### Salient Features :

- 4" Large LCD display
- Universal Platform with rounded corners to accommodate interchangeable clamps of assorted sizes
- Brushless induction motor with VFD speed control
- Elegant Plastic front
- Variable speed 20 -300 RPM
- Shaking amplitude 40 mm
- Auto start after power resumption

#### Technical Data

Models	Platform Size	Max. Volume	Max. No. of clamps (to be ordered separately)					
			2000 ml.	1000 ml.	500 ml.	250 ml.	150 ml.	100ml/ 50ml
RS-24 Plus	24" X 24"	18 Liters	9	16	25	36	49	64

Supply: 220-240 Volts, 50 Hz Single Phase.

**WORLD CLASS  
PREMIUM RANGE**



**Remi Bench Top Orbital Shaking Incubator Model**

**CIS 18 Plus** finds application in researches on bacteria, cultivation, fermentation, hybridization, chemical and biochemical reaction, enzymes and tissues research, which have a high requirement on precision of shaking speed and temperature

**Construction:** Its shell is made of engineering plastics through molding with a mechanical oscillating tray driven by a motor fitted at the bottom. The Oscillating locus is circular. The duct plate behind the working chamber is SS thin plate and all the operating keys on the LCD screen are on the front side. **Box door** is of a big flap structure made of transparent plastics to facilitate observation, removal or placement of cultures. Closed-loop control of temperature and speed is effected with microcomputer electronic controller using PID regulation mode with LCD screen display. Hot and cold air stream is circulated through a blower behind the duct plate in the working chamber, thereby improving the uniformity of temperature in the working chamber.

**Safety** Multiple start of compressor in a short time is prevented and the controller performs the function of prolonged start before compressor is started.

When the measured temperature is in excess of the set temperature by 3°C, the buzzer will give an over-temperature alarm and simultaneously the heater will shut down. When the box door opens, the door switch will cut off the power to stop the Heater, blower and rotating fan from work and the operator can remove or place the cultures safely.

**Salient Features :**

- Stainless-steel chamber and platform easy to clean
- Transparent plastic door
- Microprocessor controller with large LCD screen for temperature and shaking speed with timing function
- Self-check function easy to identify problems
- Smooth start and stop system prevents liquid spillage
- Auto-controller of fan speed to prevent damage to the samples
- Safety door switch, auto pause operation when it is opened

**Technical Data**

Model	CIS-18 Plus
Shaking Speed Range	20-300rpm
Amplitude	20mm
Temperature Range	4~50°C ±0.5°C
Display Resolution	0.1°C
Timer Range	1hour~99h:59m
Platform Size (mm)	450 x 450
Maximum Shaking Capacity (No. of flasks x Volume)*	4x2000ml, 8x1000ml, 11x500ml, 12x250ml, 28x100ml, 42x50ml
Load in Tray	≤ 10 Kg
Power Consumption	1100w
Recommended Voltage Stabilizer	VS 02

Supply: 220-240 Volts, 50 Hz, single phase.

\* Clamps to be ordered separately



RDHO 50

REMI Dry hot air oven – RDHO series are specially designed to achieve extreme dryness by evaporating all moisture contents from the biomass or other material. Microprocessor control helps in achieving precise high temperature with forced convection. Suitable for varied applications in laboratories and scientific research institutions

#### Salient Features :

- Microprocessor PID controller (with timing function)
- Polished stainless-steel chamber with rounded corners for easy & quick cleaning
- Uniform distribution of air temperature
- Forced-air convection
- Double layer glass door, larger viewing window

#### Technical Data

Model	RDHO 50	RDHO 80
Internal dimension (W × D × H) mm	420×395×350	450×400×450
External dimension (W × D × H) mm	720×590×520	740×618×630
Chamber volume (Litres)	50	80
Temperature range	RT+10°C~300°C	
Temperature accuracy	±1°C	
Display resolution	0.1°C	
Timing range	1~9999min	
Shelves (Nos)	2	
Power consumption (Watts)	1100	1550

Supply: 220-240 Volts, 50 Hz Single Phase.



RHI 50

REMI heating incubators -RHI series are suitable for achieving precise incubation temperature of different laboratory samples required for optimizing reaction sensitivity

#### Salient Features :

- Microprocessor controller
- Interior is made of polished stainless steel with rounded corners for easy & quick cleaning
- The space between the shelves is adjustable.
- Full inner glass door for easy observation
- Self-check function easy to identify problems.
- Over temperature and temperature difference alarms

#### Technical Data

Model	RHI 50	RHI 80
Internal dimension (W x D x H) mm	415 x 360 x 355	500 x 400 x 400
External dimension (W x D x H) mm	690 x 500 x 500	780 x 530 x 560
Chamber volume (Litres)	50	80
Shelves (Nos)	2	
Temperature range	RT+5°C~65°C	
Display resolution	0.1°C Temperature stability $\pm$ 0.5°C	
Type of heating	Forced air convection	
Power consumption (Watts)	250	350

Supply: 220-240 Volts, 50 Hz Single Phase.

Vacuum ovens are very versatile pieces of equipment with applications in laboratory research, engineering, and industry. Vacuum oven is generally used for drying of substances which are hygroscopic and heat sensitive and is based on the principle of creating a vacuum to decrease the chamber pressure below the vapour pressure of the water causing it to boil. It can be filled with inert gases, especially for rapid drying of some compound material. The low pressure environment also minimizes oxidation during drying.

The materials to be dried are kept on trays and pressure is reduced by means of vacuum pump. Steam is passed through the space between trays and jacket, so that heat transfer occurs by conduction. The oven door is locked airtight and connected to vacuum pump to reduce the pressure. Microprocessor controller with digital display ensures precise and homogenous temperature control. Dual layer tempered glass door is provided for clear observation. Adjustable aluminum expansion shelves ensure optimal heat transfer within oven chamber.



RVO-50

Technical Data	
Model	RVO-50
Temperature Range	RT+10°C to 200°C
Display Resolution	0.1°C
Temperature Stability	±1°C
Vacuum Degree	133Pa
Chamber Material	Stainless steel
Aluminum Shelves	2
Ambient Temperature	+5~40°C
Power Consumption	1450W
Interior Dimension (W x D x H) (mm)	415X370X345
Exterior Dimension (W x D x H) (mm)	730x560x550

Supply: 220-240 Volts, 50 Hz Single Phase.



- Machine filled CFC free PUF insulation to eliminate void pockets
- Unique design of thermal barrier for better energy efficiency
- Heating by long SS tubular heaters
- Additional tray to store samples
- Chamber calibration port on side
- Hermetically sealed Compressor with CFC free refrigerant (CIS-24 Plus)
- Microprocessor controller with 4" LCD display for display of shaking speed & temperature
- 9 programs memory
- High temperature safety cut off & alarms for high / low set temperature
- Electrical circuit breaker
- Time delay for compressor switch on (CIS-24 Plus)
- Overload cut off relay for compressor (CIS-24 Plus)
- Rounded inner chamber for easy cleaning
- Attractive door profile
- Weight carrying capacity of each tray : 30 Kg Uniformly distributed
- Auto door closer
- Smart Handle with LED door closure indication

REMI Orbital Shaking Incubators are designed for precise temperature control and simultaneous shaking applications required in fermentation studies, enzyme reaction, life sciences, tissue culture and biotechnology, research labs.

**These chambers are available in standard & GMP versions.**

#### Salient Features :

- Brushless induction Motor with variable frequency drive suitable for continuous operations
- Step less variable frequency drive ensures gentle shaking start and maintains set speed
- Counter balanced mechanism for high stability in uneven load of different sized flasks
- Universal Shaking Platform to accommodate different sized assorted flasks
- Maximum shaking capacity - 9 Flasks x 2000 ml
- Powerful fan motor for forced air circulation to maintain uniform conditions inside chamber

#### Optional

- (I) Touch screen display ( TFT ) with additional features(Details overleaf)
- (ii) Validation protocol with IQ, OQ, PQ Documentation
- (iii) Port for calibration probes / safety back up

## LCD Display

## Features

- 4 inch attractive LCD display
- Intelligent Controller helps maintain temperature in case of sensor failure
- Battery Backup for Temperature Controller
- Auto tuning of controller
- Self-Diagnosis for errors
- Histogram format of 24 hours temperature recording
- Settable High / low alarm points
- Memory for storage of upto 1000 records
- Centronic interface to record Temperature, Date, & Time by attaching Dot Matrix printer with adjustable print interval
- Alarm on equipment / output for remote alarm

## Touch Screen Display

## Features

- 7 inch big colour touch screen
- PLC (Programmable logic controller)
- Memory of 1500 records
- Centronic interface to record Temperature, Date & Time by attaching Dot Matrix printer with adjustable print interval
- Ethernet port
- Battery backup in case of power failure for display, alarms & off-line data logging (optional)
- Programmable cyclic timer for controlling illumination conditions
- Remi 'Datasoft' Data acquisition software complying to 21 CFR part 11 as per USFDA Guidelines (optional)

## REMI 'Data Soft'

## Features

- Multiple level alpha numerical password with password ageing
- Secured audit trail report
- Alarm report with mention of alarm condition
- Mean Kinetic Temperature able to be calculated for any days & alarm deviation report
- Reports in graphical and tabular form
- Data Stored in PC server with RS-485 connectivity and can be monitored on PC with password authentication
- Multi chamber data acquisition on single software
- Communication through RS 485 / TCP IP
- GSM Mobile Alert for six Numbers
- Power failure and resumption recorded with date and time

## Optional Accessories

## To be Ordered separately

- Chamber illumination with the help of 2 Nos. fluorescent tubes
- Chamber illumination with 2 Nos. ultra violet lights
- 24 hours Cyclic Timer for regulating illumination conditions
- Data logger for 8 Point temperature recording with sensor printer interface and software
- Software as per 21 CFR Part 11 requirements
- PLC Based Control System with HMI Touch Screen
- Biometrics Magnetic Door Access for Secured Door opening with software to maintain log
- Validation (mapping) consist of one cycle for temperature at any one set point for 24 hours on empty and loaded condition
- Standby Refrigeration System
- GSM alert through SIM card

## Technical Data

	CIS-24 Plus	RIS-24 Plus
Temperature Range & Accuracy	5°C to 60°C, ± 0.5°C	5°C above ambient to 60°C, ± 0.5°C
Internal Volume (Liters)		215
Platform Size		580mm x 600mm
Maximum Shaking Capacity (Volume x No. of flasks)*	100ml x 49, 150ml x 49, 250ml x 33, 500ml x 24, 1000ml x 15, 2000 ml x 9	
Shaking Speed range (RPM)		20 to 250
Shaking Amplitude		25 mm
Internal Dimensions W x D x H (mm)		660 x 765 x 650
External Dimensions W x D x H (mm)		800 x 1150 x 1300
Temperature control		Microprocessor with PT-100 sensor
Display		4" LCD Screen, Large size Display for ease of reading
Power Failure Alarm		Audio Visual Alarm
Door Open Alarm		Audio Alarm in case door open for over one minute
Temperature Variation Alarm		Set Temperature ± 2°C, Audio Visual Alarm
Illumination		8 Watts Fluorescent Tube
Internal Body Material		Stainless Steel - 304 grade (Standard Models), Stainless Steel - 316 grade (GMP Models)
External Body Material		Powder Coated CRCA Steel (Standard Models), Stainless Steel - 304 grade (GMP Models)
Insulation (CFC free polyurethane foam)		70 mm minimum for Body & 80 mm for Door
Noise Level		Less Than 65 db (A)
Recommended Voltage Stabilizer	VS-02	X

Supply: 220-240 Volts, 50 Hz Single Phase.

\*Clamps to be ordered separately



### Salient Features :

- Temperature range 5°C to 60°C
- Unique design of thermal barrier for better energy efficiency
- Machine filled CFC free PUF insulation to eliminate void pockets
- Powerful fan motor for forced air circulation to maintain uniform conditions inside chamber
- Heating by long life SS tubular heaters
- Chamber calibration port on side
- Adjustable trays
- Hermetically sealed Compressor with CFC free refrigerant
- High temperature safety cut off & alarms for high / low set parameters
- Sensor failure alarm
- Electrical circuit breaker
- Time delay for compressor switch on
- Overload cut off relay for compressor
- Rounded inner chamber for easy cleaning
- Attractive door profile
- Microprocessor controller with LED display of Temperature with set, process value & audio visual alarm (standard)
- Weight carrying capacity of each tray : 30 Kg Uniformly distributed
- Auto door closer
- Smart Handle with LED door closure indication

### Optional

- (i) 4" LCD display with additional features (Details overleaf)
- (ii) Touch screen display ( TFT ) with additional features(Details overleaf)
- (iii) Validation protocol with IQ, OQ, PQ Documentation
- (iv) Port for calibration probes / safety back up

REMI Cooling Incubators are designed for applications in pharmaceutical, microbiology, biotechnology, chemical & research labs. These chambers are used for BOD test culture of bacteria, microorganism, tissue culture, incubation, immunological work & storage of vaccines etc.

**These incubators are available in standard & GMP versions.**

## LCD Display

## Features

- 4 Inch attractive LCD display
- Intelligent Controller helps maintain temperature in case of sensor failure
- Battery Backup for Temperature Controller
- Auto tuning of controller
- Self-Diagnosis for errors
- Histogram format of 24 hours temperature recording
- Settable High / low alarm points
- Memory for storage of upto 1000 records
- Centronic interface to record Temperature, Date, & Time by attaching Dot Matrix printer with adjustable print interval
- Alarm on equipment / output for remote alarm
- Cyclic Transfer (Optional)

## Touch Screen Display

## Features

- 7 inch big colour touch screen
- PLC (Programable logic controller)
- Memory of 1500 records
- Centronic interface to record Temperature, Date & Time by attaching Dot Matrix printer with adjustable print interval
- Ethernet port
- Battery backup in case of power failure for display, alarms & off-line data logging (optional)
- Programmable cyclic timer for controlling illumination conditions
- Remi 'Datasoft' Data acquisition software complying to 21 CFR part 11 as per USFDA Guidelines (optional)

## REMI 'Data Soft'

## Features

- Multiple level alpha numerical password with password ageing
- Secured audit trail report
- Alarm report with mention of alarm condition
- Mean Kinetic Temperature able to be calculated for any days & alarm deviation report
- Reports in graphical and tabular form
- Data Stored in PC server with RS-485 connectivity and can be monitored on PC with password authentication
- Multi chamber data acquisition on single software
- Communication through RS 485 / TCP IP
- Power failure and resumption recorded with date and time

## Optional Accessories

## To be Ordered separately

- Chamber illumination with the help of 2 Nos. fluorescent tubes
- Chamber illumination with 2 Nos. ultra violet lights
- 24 hours Cyclic Timer for regulating illumination conditions
- Data logger for 8 Point temperature recording with sensor printer interface and software
- Software as per 21 CFR Part 11 requirements
- PLC Based Control System with HMI Touch Screen
- Biometrics Magnetic Door Access for Secured Door opening with software to maintain log
- Validation (mapping) consist of one cycle for temperature at any one set point for 24 hours on empty and loaded condition
- Standby Refrigeration System
- GSM alert through SIM card

## Technical Data

	CI-6 Plus	CI-10 Plus	CI-12 Plus	CI-16 Plus	CI-19 Plus	CI-28 Plus	CI-35 Plus
Internal Volume (Litres)	200	280	370	450	540	800	1000
Number of tray	2	3	4	5	6	6	7
Internal Dimensions W x D x H (mm)	660 x 655 x 450	660 x 655 x 650	660 x 655 x 850	660 x 655 x 1050	660 x 655 x 1250	800 x 800 x 1250	800 x 800 x 1580
External Dimensions W x D x H (mm)	800 x 1095 x 1020	800 x 1095 x 1220	800 x 1095 x 1420	800 x 1095 x 1620	800 x 1095 x 1820	960 x 1370 x 1950	960 x 1370 x 2270
Temperature Range & Accuracy	5°C to 60°C, ± 0.5°C						
Temperature control	Microprocessor with PT-100 sensor						
Display	1' - 7 Segment, Big Size LED						
Power Failure Alarm	Visual Alarm						
Door Open Alarm	Audio Visual Alarm in case door open for over one minute						
Temperature Variation Alarm	Set Temperature ± 2°C, Audio Visual Alarm						
Illumination	8 Watts Fluorescent Tube						
Internal Body Material	Stainless Steel - 304 grade (Standard Models), Stainless Steel - 316 grade (GMP Models)						
External Body Material	Powder Coated CRCA Steel (Standard Models), Stainless Steel - 304 grade (GMP Models)						
Insulation	70 mm minimum for Body & 80 mm for Door, CFC free polyurethane foam						
Noise Level	Less Than 65 db(A)						
Recommended Voltage Stabilizer	VS-02	VS-02	VS-02	VS-03	VS-03	VS-06	VS-06

Supply: 220-240 Volts, 50 Hz Single Phase.



### Cooling Incubators

Cooling Incubators find applications in Pharmaceuticals, Biotechnology and Research institutions for storage and incubation studies. They are mainly used for B.O.D. test, storage of sensitive cultures, vaccines etc. culture of bacteria microorganism and plant life, serum incubation studies and Immunological work etc.

These Chambers are constructed of double walls, the exterior is made of sheet steel while the inner chamber is made of stainless steel.

### Salient Features :

- Safety thermostat to prevent over heating
- Audio visual alarm warning of Temperature variation
- High voltage safety cutoff for unit protection
- Plexi glass inner door to inspect specimens

### Optional

- Chamber illumination with fluorescent or ultra violet lights
- Cyclic timer for regulating illumination conditions

### Technical Data

	CI-3S	CI-6S	CI-10S
Internal Volume	85 LTRS	170 LTRS	285 LTRS
No. of Shelves	2	2	3
Temperature Range	5°C to 60°C ± 0.5°C		
Temperature Control	Digital		
Int. Dimensions W X D X H(mm)	420 X 380 X 560	500 X 410 X 840	580 X 490 X 990
Ext. Dimensions W X D X H(mm)	540 X 590 X 1050	620 X 670 X 1380	700 X 750 X 1530
Inner Chamber Material	Stainless steel 304 (AISI Grade, Non Corrosive, Non Magnetic)		
Outer Body Material	Powder coated CRCA steel		
Recommended Voltage Stabilizer	VS-01	VS-02	VS-02

Supply: 220-240 Volts, 50 Hz Single Phase.



New range of refrigerators from REMI are designed for storage applications in pharmaceutical, microbiology, biotechnology, chemical, clinical diagnostic, hospitals & research institutions. The unit is supplied with a glass door for convenient sample viewing, forced air circulation system ensures uniform temperature throughout the chambers. Digital controller is provided for display of internal temperature along with alarm systems.

#### Salient Features :

- Plastic inner chamber ; Outer body pre painted G.I.
- Energy efficient
- Uniform cooling by forced air circulation
- Adjustable Plastic coated wire mesh shelves
- Clear product visibility with dual glass
- High / low temperature alarm

#### Technical Data

Model No.	RLR-200	RLR-300	RLR-400
Capacity (Litres)	200	300	400
Temperature Range	1° C ~ 10 ° C		
No. of Door (Glass)	1	1	1
Baskets / Shelves	3	4	4
External Dimensions (mm)			
Width	533	584	610
Depth	533	584	584
Height	1575	1702	1981

Supply: 220-240 Volts 50 Hz Single Phase.



### Salient Features :

- Temperature range 2°C to 12°C  
Unique design of thermal barrier for better energy efficiency
- Machine filled CFC free PUF insulation to eliminate void pockets
- Powerful fan motor for forced air circulation to maintain uniform conditions inside chamber
- Chamber calibration port on side
- Adjustable trays
- Hermetically sealed Compressor with CFC free refrigerant
- Alarms for high / low set parameters
- Sensor failure alarm
- Electrical circuit breaker
- Time delay for compressor switch on
- Overload cut off relay for compressor
- Rounded inner chamber for easy cleaning
- Attractive door profile
- Microprocessor controller with LED display of Temperature with set, process value & audio visual alarm (standard)
- Weight carrying capacity of each tray : 30 Kg Uniformly distributed
- Auto door closer
- Smart Handle with LED door closure indication

### Optional

- (i) 4" LCD display with additional features (Details overleaf)
- (ii) Touch screen display ( TFT ) with additional features(Details overleaf)
- (iii) Validation protocol with IQ, OQ, PQ Documentation
- (iv) Port for calibration probes / safety back up

REMI Cold Cabinets are designed for bio sample storage applications in pharmaceutical, microbiology, biotechnology, chemical & research labs.

**These cabinets are available in standard & GMP versions.**

## LCD Display

## Features

- 4 Inch attractive LCD display
- Intelligent Controller helps maintain temperature in case of sensor failure
- Battery Backup for Temperature Controller
- Auto tuning of controller
- Self-Diagnosis for errors
- Histogram format of 24 hours temperature recording
- Settable High / low alarm points
- Memory for storage of upto 1000 records
- Centronic interface to record Temperature, Date, & Time by attaching Dot Matrix printer with adjustable print interval
- Alarm on equipment / output for remote alarm

## Touch Screen Display

## Features

- 7 inch big colour touch screen
- PLC (Programable logic controller)
- Memory of 1500 records
- Centronic interface to record Temperature, Date & Time by attaching Dot Matrix printer with adjustable print interval
- Ethernet port
- Battery backup in case of power failure for display, alarms & off-line data logging (optional)
- Remi 'Datasoft' Data acquisition software complying to 21 CFR part 11 as per USFDA Guidelines (optional)

## REMI 'Data Soft'

## Features

- Multiple level alpha numerical password with password ageing
- Secured audit trail report
- Alarm report with mention of alarm condition
- Mean Kinetic Temperature able to be calculated for any days & alarm deviation report
- Reports in graphical and tabular form
- Data Stored in PC server with RS-485 connectivity and can be monitored on PC with password authentication
- Multi chamber data acquisition on single software
- Communication through RS 485 / TCP IP
- GSM Mobile Alert for six Numbers
- Power failure and resumption recorded with date and time

## Optional Accessories

## To be Ordered separately

- Chamber illumination with the help of 2 Nos. fluorescent tubes
- Chamber illumination with 2 Nos. ultra violet lights
- 24 hours Cyclic Timer for regulating illumination conditions
- Data logger for 8 Point temperature recording with sensor printer interface and software
- Software as per 21 CFR Part 11 requirements
- PLC Based Control System with HMI Touch Screen
- Biometrics Magnetic Door Access for Secured Door opening with software to maintain log
- Validation (mapping) consist of one cycle for temperature at any one set point for 24 hours on empty and loaded condition
- Standby Refrigeration System
- GSM alert through SIM card

## Technical Data

	CC-6 Plus	CC-10 Plus	CC-12 Plus	CC-16 Plus	CC-19 Plus	CC-28 Plus	CC-35 Plus
Internal Volume (Litres)	200	280	370	450	540	800	1000
Number of trays	2	3	4	5	6	6	7
Dimensions W x D x H (mm)	660x655x450	660x655x650	660x655x850	660x655x1050	660x655x1250	800x800x1250	800x800x1580
External Dimensions W x D x H (mm)	800x1095x1020	800x1095x1220	800x1095x1420	800x1095x1620	800x1095x1820	960x1370x1950	960x1370x2270
Temperature Range & Accuracy	2°C to 12°C, ± 0.5°C						
Temperature control	Microprocessor with PT-100 sensor						
Display	1" - 7 Segment, Big Size LED						
Power Failure Alarm	Visual Alarm						
Door Open Alarm	Audio Visual Alarm in case door open for over one minute						
Temperature Variation Alarm	Set Temperature ± 2°C, Audio Visual Alarm						
Illumination	8 Watts Fluorescent Tube						
Internal Body Material	Stainless Steel - 304 grade (Standard Models), Stainless Steel - 316 grade (GMP Models)						
External Body Material	Powder Coated CRCA Steel (Standard Models), Stainless Steel - 304 grade (GMP Models)						
Insulation	70 mm minimum for Body & 80 mm for Door, CFC free polyurethane foam						
Noise Level	Less Than 65 db(A)						
Recommended Voltage Stabilizer	VS-02	VS-02	VS-02	VS-03	VS-03	VS-06	VS-06

Supply: 220-240 Volts, 50 Hz Single Phase.



- Hermetically sealed Compressor with CFC free refrigerant
- Chamber calibration port on side
- Adjustable trays
- Output for remote alarm
- Microprocessor controller with LCD display & capacitance type sensor
- 4" attractive LCD display for direct display of humidity & temperature
- Auto tuning of controller
- Settable High / low alarm points with date and time
- Centronic interface to record Temperature, Humidity, Date & Time by attaching Dot Matrix printer with Adjustable print interval
- Remi 'Datasoft' data acquisition software as per 21 CFR part 11 requirements (Optional)
- Power failure and resumption recorded with date and time
- PC communication through RS-485 with data acquisition software
- High temperature safety cut off & alarms for high / lowset parameters
- Low water level alarm and power cutoff of boiler tank heater
- Overload cut off relay for compressor
- Rounded inner chamber for easy cleaning
- Attractive door profile
- Data logger for 8 Point (4+4) temperature / humidity recording with sensor, printer interface and software (Optional)
- Weight carrying capacity of each tray : 30 Kg Uniformly distributed
- Auto door closer
- Smart Handle with LED door closure indication

REMI Humidity Chambers are designed for testing of electronic, electrical components, corrosion studies on mechanical parts, shelf life studies on paints, varnishes and cement at respective manufacturing facilities. These chambers control precise temperature and Humidity.

**These chambers are available in standard & GMP versions.**

#### **Salient Features :**

- Precise monitoring of temperature and humidity conditions
- Temperature range 10°C to 60°C, Humidity range 40% to 95% RH
- Unique design of thermal barrier for better energy efficiency
- Machine filled CFC free PUF insulation to eliminate void pockets
- Powerful fan motor for forced air circulation to maintain uniform conditions inside chamber
- Heating by long life SS tubular heaters

#### **Optional**

- (i) Touch screen display ( TFT ) with additional features(Details overleaf)
- (ii) Validation protocol with IQ, OQ, PQ Documentation
- (iii) Port for calibration probes / safety back up

## LCD Display

## Features

- 4 Inch attractive LCD display
- Intelligent Controller helps maintain temperature in case of sensor failure
- Battery Backup for Temperature Controller
- Auto tuning of controller
- Self-Diagnosis for errors
- Histogram format of 24 hours temperature recording
- Settable High / low alarm points
- Memory for storage of upto 1000 records
- Centronic interface to record Temperature, Date, & Time by attaching Dot Matrix printer with adjustable print interval
- Alarm on equipment / output for remote alarm

## Touch Screen Display

## Features

- 7 inch big colour touch screen
- PLC (Programable logic controller)
- Memory of 1500 records
- Centronic interface to record Temperature, Date & Time by attaching Dot Matrix printer with adjustable print interval
- Ethernet port
- Battery backup in case of power failure for display, alarms & off-line data logging (optional)
- Programmable cyclic timer for controlling illumination conditions
- Remi 'Datasoft' Data acquisition software complying to 21 CFR part 11 as per USFDA Guidelines (optional)

## REMI 'Data Soft'

## Features

- Multiple level alpha numerical password with password ageing
- Secured audit trail report
- Alarm report with mention of alarm condition
- Mean Kinetic Temperature able to be calculated for any days & alarm deviation report
- Reports in graphical and tabular form
- Data Stored in PC server with RS-485 connectivity and can be monitored on PC with password authentication
- Multi chamber data acquisition on single software
- Communication through RS 485 / TCP IP
- GSM Mobile Alert for six Numbers
- Power failure and resumption recorded with date and time

## Optional Accessories

## To be Ordered separately

- Chamber illumination with the help of 2 Nos. fluorescent tubes
- Chamber illumination with 2 Nos. ultra violet lights
- 24 hours Cyclic Timer for regulating illumination conditions
- Data logger for 8 / 16 Point temperature & Humidity recording with sensors printer interface and software
- Software as per 21 CFR Part 11 requirements
- PLC Based Control System with HMI Touch Screen
- Biometrics Magnetic Door Access for Secured Door opening with software to maintain log
- Validation (mapping) consist of one cycle for temperature and humidity at any one set point for 24 hours on empty and loaded condition
- Standby Refrigeration System
- Standby Humidity System
- GSM alert through SIM card

## Technical Data

	CHM-6 Plus	CHM-10 Plus	CHM-12 Plus	CHM-16 Plus	CHM-19 Plus	CHM-28 Plus	CHM-35 Plus
Internal Volume (Liters)	200	280	370	450	540	800	1000
Number of Shelves	2	3	4	5	6	6	7
Internal Dimensions W x D x H (mm)	660 x 655 x 450	660 x 655 x 650	660 x 655 x 850	660 x 655 x 1050	660 x 655 x 1250	800 x 800 x 1250	800 x 800 x 1580
External Dimensions W x D x H (mm)	800 x 1095 x 1020	800 x 1095 x 1220	800 x 1095 x 1420	800 x 1095 x 1620	800 x 1095 x 1820	960 x 1370 x 1950	960 x 1370 x 2270
Temperature Range & Accuracy	10°C to 60°C, ± 1°C						
Humidity Range (Rh) & Accuracy	40% to 95%, ± 3%						
Temperature & Humidity control	Microprocessor with Capacitance type sensor						
Display	4" LCD Screen, Large size Display for ease of reading						
Power Failure Alarm	Visual Alarm						
Door Open Alarm	Audio Visual Alarm in case door open for over one minute						
Temperature / Humidity Variation Alarm	Set Humidity ± 3%, Set Temperature ± 1°C, Audio Visual Alarm						
Illumination	8 Watts Fluorescent Tube						
Internal Body Material	Stainless Steel - 304 grade (Standard Models), Stainless Steel - 316 grade (GMP Models)						
External Body Material	Powder Coated CRCA Steel (Standard Models), Stainless Steel - 304 grade (GMP Models)						
Insulation	70 mm minimum for Body & 80 mm for Door, CFC free polyurethane foam						
Noise Level	Less Than 65 db(A)						
Recommended Voltage Stabilizer	VS-04			VS-07			

Supply: 220-240 Volts, 50 Hz Single Phase.



SC-19 Plus

REMI Stability Chambers are designed as per ICH Guidelines for precise monitoring of temperature and humidity conditions required for long term, intermediate & accelerated stability studies at chemical, pharmaceutical, agrochemical manufacturing facilities. These chambers are manufactured to comply with GMP requirements

#### Salient Features :

- Fulfils storage conditions of 25°C - 60% RH, 40°C - 75% RH, 30°C - 65% RH, 25°C - 40% RH
- Precise monitoring of temperature and humidity conditions
- Unique design of thermal barrier for better energy efficiency
- Machine filled CFC free PUF insulation to eliminate void pockets
- Powerful fan motor for forced air circulation to maintain uniform conditions inside chamber within permissible limit Heating by long life SS tubular heaters
- Hermetically sealed Compressor with CFC free refrigerant
- Chamber calibration port on side
- Adjustable trays
- Output for remote alarm



- Microprocessor controller with LCD display & capacitance type sensor
- 4 " attractive LCD display for direct display of humidity & temperature
- Auto tuning of controller
- Battery Backup for Controller
- Settable High / Low alarm points
- Centronic interface to record temperature, Humidity, Date & Time by attaching Dot Matrix printer with adjustable print interval
- REMI 'Datasoft' data acquisition software complying to 21 CFR part 11 as per USFDA Guidelines (Optional)
- Power failure and resumption recorded with date and time
- PC communication through RS - 485 with data acquisition software
- High temperature safety cut off & alarms for high/low set parameters
- Low water level alarm and power cutoff of boiler tank heater
- Time delay for compressor switch on
- Overload cut off relay for compressor
- Rounded inner chamber for easy cleaning
- Auto door closer
- Attractive door profile
- Data logger for 8 point (4+4) temperature / humidity recording with sensor, printer interface and software (Optional)
- Weight carrying capacity of each tray : 30 Kg Uniformly distributed
- Smart Handle with LED door closure indication

#### Optional

- (i) Touch screen display ( TFT ) with additional features(Details overleaf)
- (ii) Validation protocol with IQ, OQ, PQ Documentation
- (iii) Port for calibration probes / safety back up

## LCD Display

## Features

- 4 Inch attractive LCD display
- Intelligent Controller helps maintain temperature in case of sensor failure
- Battery Backup for Temperature Controller
- Auto tuning of controller
- Self-Diagnosis for errors
- Histogram format of 24 hours temperature recording
- Settable High / low alarm points
- Memory for storage of upto 1000 records
- Centronic interface to record Temperature, Date, & Time by attaching Dot Matrix printer with adjustable print interval
- Alarm on equipment / output for remote alarm

## Touch Screen Display

## Features

- 7 inch big colour touch screen
- PLC (Programable logic controller)
- Memory of 1500 records
- Centronic interface to record Temperature, Date & Time by attaching Dot Matrix printer with adjustable print interval
- Ethernet port
- Battery backup in case of power failure for display, alarms & off-line data logging (optional)
- Programmable cyclic timer for controlling illumination conditions
- Remi 'Datasoft' Data acquisition software complying to 21 CFR part 11 as per USFDA Guidelines (optional)

## REMI 'Data Soft'

## Features

- Multiple level alpha numerical password with password ageing
- Secured audit trail report
- Alarm report with mention of alarm condition
- Mean Kinetic Temperature able to be calculated for any days & alarm deviation report
- Reports in graphical and tabular form
- Data Stored in PC server with RS-485 connectivity and can be monitored on PC with password authentication
- Multi chamber data acquisition on single software
- Communication through RS 485 / TCP IP
- GSM Mobile Alert for six Numbers
- Power failure and resumption recorded with date and time

## Optional Accessories

## To be Ordered separately

- Data logger for 8/16 Point temperature & Humidity recording with sensor printer interface and software (Optional)
- Software as per 21 CFR Part 11 requirements
- PLC Based Control System with HMI Touch Screen
- Biometrics Magnetic Door Access for Secured Door opening with software to maintain log
- Validation (mapping) consist of one cycle for temperature and humidity at any one set point for 24 hours on empty and loaded condition
- Standby Refrigeration System
- Standby Humidity System
- GSM alert through SIM card

## Technical Data

	SC-6 Plus	SC-10 Plus	SC-12 Plus	SC-16 Plus	SC-19 Plus	SC-28 Plus	SC-35 Plus
Internal Volume (Liters)	200	280	370	450	540	800	1000
Number of tray	2	3	4	5	6	6	7
Internal Dimensions W x D x H (mm)	660 x 655 x 450	660 x 655 x 650	660 x 655 x 850	660 x 655 x 1050	660 x 655 x 1250	800 x 800 x 1250	800 x 800 x 1580
External Dimensions W x D x H (mm)	800 x 1095 x 1020	800 x 1095 x 1220	800 x 1095 x 1420	800 x 1095 x 1620	800 x 1095 x 1820	960 x 1370 x 1950	960 x 1370 x 2270
Temperature Range & Accuracy	10°C to 60°C, $\pm$ 1°C						
Humidity Range (Rh) & Accuracy	40% to 95%, $\pm$ 3%						
Temperature & Humidity control	Microprocessor with Capacitance type sensor						
Display	4" LCD Screen, Large size Display for ease of reading						
Power Failure Alarm	Visual Alarm						
Door Open Alarm	Audio Visual Alarm in case door open for over one minute						
Humidity/Temperature Variation Alarm	Set Humidity $\pm$ 3% Rh, Set Temperature $\pm$ 1°C, Audio Visual Alarm						
Illumination	8 Watts Fluorescent Tube						
Internal Body Material	Stainless Steel - 316 grade						
External Body Material	Stainless Steel - 304 grade						
Insulation	70 mm minimum for Body & 80 mm for Door, CFC free polyurethane foam						
Noise Level	Less Than 65 db(A)						
Recommended Voltage Stabilizer	VS-04			VS-07		VS-07	

Supply: 220-240 Volts, 50 Hz Single Phase.

## Deep Freezer



These Deep Freezers are designed for quick freezing and storing of Blood Components, Serum, Vaccines, Biological & Medical Specimens, Clinical Samples, etc. at low temperatures.

Engineered for just a little bit more, the new REMI series of Upright Freezers gives you up to -25°C instead of the conventional -20°C.

### Salient Features :

- Plastic inner chamber ; Outer body pre painted G.I.
- Quick freezing function
- Sealed drawers - prevent frost loss from open door
- Solid state temperature controller
- Adjustable baskets / shelves
- Low energy consumption and noise levels

### Technical Data

Model No.	RFV - 245	RFV - 340
Capacity (Litres)	245	340
Temperature Range °C	-16 °C ~ -24 °C	
Door	1	1
Baskets / Shelves	6	7
External Dimensions (mm)		
Width	533	610
Depth	610	635
Height	1448	1854

Supply: 220-240 Volts 50 Hz Single Phase.

## Quick Freezer



These Quick Freezers are designed for quick freezing and storing of Blood Components, Serum, Vaccines, Biological and Medical Specimens, Clinical Samples etc. at low temperatures.

These units are available in horizontal and vertical versions. Constructed of double walls, the exterior is made of sheet steel while the interior of stainless steel having PUF insulation to minimize heat loss.

### Salient Features :

- Low Temperature up to -20°C (in AC room)
- Stainless steel inner chamber
- Extremely efficient PUF insulation to minimize heat loss
- High-tech solid state digital indicator-cum-controller

### Optional

- Seven days circular chart recorder

### Technical Data

	Vertical Freezers	
	RQFV-170	RQFV-265
Minimum Temperature	-20°C	-20°C
Internal Volume	170Ltrs.	265Ltrs.
Int. Dimensions W x D x H (mm)	500 x 430 x 850	580 x 500 x 990
Ext. Dimensions W x D x H (mm)	630 x 580 x 1380	700 x 660 x 1590
Inner Chamber Material	Stainless Steel 304 (AISI Grade, Non Corrosive, Non Magnetic)	
Outer Body Material	Powder Coated CRCA Steel	
Recommended Voltage Stabilizer	VS - 02	VS - 02

Supply: 220-240 Volts, 50 Hz Single Phase.



- Hermetically sealed Compressor with CFC free refrigerant
- Alarms for high / low set parameters
- Sensor failure alarm
- Electrical circuit breaker
- Rounded inner chambers for easy cleaning
- Microprocessor controllers with LED display of Temperature with set, process value & audio visual alarm
- Weight carrying capacity of each tray : 30 Kg Uniformly distributed
- Smart Handle with LED door closure indication

### Optional

(I) Port for calibration probes / safety back up

Technical Data		
Model	RRF - 250 / RRFD - 250	
	Refrigerator	Freezer
Internal Volume (Liters)	250	265
Number of Trays	2	2
Temperature Range	2°C to 12°C	-15°C to -20°C (RRF - 250) -30°C to -40°C (RRFD - 250)
Internal Dimensions W x D x H (mm)	660 x 625 x 575	660 x 675x 575
External Dimensions W x D x H (mm)	800 x 975x1800	
Temperature Control	Microprocessor with PT-1000 sensors	
Display	1"-7 Segment, Big Size LED	
Temperature Variation Alarm	Set Temperature $\pm 2^\circ\text{C}$ , Audio Visual Alarm	
Illumination	8 Watts Fluorescent Tube (in Refrigerator only)	
Internal Body Material	Stainless Steel-304 grade (Standard Models), Stainless Steel-316 (GMP Models)	
External Body Material	Powder Coated CRCA Steel (Standard Models), Stainless Steel-304 grade (GMP Models)	
Insulation	80mm minimum for Body and 80mm for Door, CFC free polyurethane foam	
Noise Level	Less than 65 dB (A)	
Recommended Voltage Stabilizer	VS-04	

Supply 220-240 Volts, 50 Hz Single Phase.

### Notes:

Models with both chambers as Refrigerator or both chambers as Freezer can be offered.



#### Salient Features :

- Temperature up to -20°C / -40°C (AC room)
- Upright models with small foot prints
- Unique design of thermal barrier for better energy efficiency
- Machine filled CFC free PUF insulation to eliminate void pockets
- Adjustable trays
- Hermetically sealed Compressor with CFC free refrigerant
- Alarms for high/low set parameters
- Sensor failure alarm
- Electrical circuit breaker
- Time delay for compressor switch on
- Overload cut off relay for compressor
- Rounded inner chamber for easy cleaning
- Attractive door profile
- Microprocessor controller with LED display of Temperature with set, process value & audio visual alarm (standard)
- Weight carrying capacity of each tray : 30 Kg Uniformly distributed
- Auto door closer
- Smart Handle with LED door closure indication

#### Optional

- (i) 4" LCD display with additional features (Details overleaf)
- (ii) Touch screen display ( TFT ) with additional features(Details overleaf)
- (iii) Validation protocol with IQ, OQ, PQ Documentation
- (iv) Port for calibration probes / safety back up

REMI Deep Freezers are designed for storage of biological samples in biotech, life science, clinical research as well as medical & pharmaceutical specimens, serums, vaccines, blood components. These freezers are available with temperatures up to -20°C and -40°C.

**These freezers are available in standard & GMP versions.**

## LCD Display

## Features

- 4 Inch attractive LCD display
- Intelligent Controller helps maintain temperature in case of sensor failure
- Battery Backup for Temperature Controller
- Auto tuning of controller
- Self-Diagnosis for errors
- Histogram format of 24 hours temperature recording
- Settable High / low alarm points
- Memory for storage of upto 1000 records
- Centronic interface to record Temperature, Date, & Time by attaching Dot Matrix printer with adjustable print interval
- Alarm on equipment / output for remote alarm

## Touch Screen Display

## Features

- 7 inch big colour touch screen
- PLC (Programable logic controller)
- Memory of 15000 records
- Centronic interface to record Temperature, Date & Time by attaching Dot Matrix printer with adjustable print interval
- Ethernet port
- Battery backup in case of power failure for display, alarms & off-line data logging (optional)
- Remi 'Datasoft' Data acquisition software complying to 21 CFR part 11 as per USFDA Guidelines (optional)

## REMI 'Data Soft'

## Features

- Multiple level alpha numerical password with password ageing
- Secured audit trail report
- Alarm report with mention of alarm condition
- Mean Kinetic Temperature able to be calculated for any days & alarm deviation report
- Reports in graphical and tabular form
- Data Stored in PC server with RS-485 connectivity and can be monitored on PC with password authentication
- Multi chamber data acquisition on single software
- Communication through RS 485 / TCP IP
- GSM Mobile Alert for six Numbers
- Power failure and resumption recorded with date and time

## Optional Accessories

## To be Ordered separately

- Data logger for 8 Point temperature recording with sensor printer interface and software
- Software as per 21 CFR Part 11 requirements
- PLC Based Control System with HMI Touch Screen
- Biometrics Magnetic Door Access for Secured Door opening with software to maintain log
- Validation (mapping) consist of one cycle for temperature at any one set point for 24 hours on empty and loaded condition
- Standby Refrigeration System
- GSM alert through SIM card

## Technical Data

	RQV-200 Plus	RQV-300 Plus	RQV-400 Plus	RQV-500 Plus	RQV-600 Plus	RQVD-200 Plus	RQVD-300 Plus	RQVD-400 Plus			
Internal Volume (Liters)	200	300	400	500	600	200	300	400			
Number of trays	2	3	4	5	6	2	3	4			
Internal Dimensions W x D x H (mm)	660x765x450	660x765x650	660x765x850	660x765x1050	660x765x1250	640x755x 430	640x755x 630	640x755x830			
External Dimensions W x D x H (mm)	800x975x1020	800x975x1220	800x975x1420	800x975x1620	800x975x1820	800x975x1020	800x975x1220	800x975x1420			
Minimum Temperature	-20°C					-40°C (AC room)					
Insulation (CFC free polyurethane foam)	80 mm minimum for Body & 80 mm for Door					80 mm minimum for Body & 80 mm for Door					
Temperature control	Microprocessor										
Display	1" - 7 Segment, Big Size LED										
Power Failure Alarm	Visual Alarm										
Door Open Alarm	Audio Visual Alarm in case door open for over one minute										
Illumination	No										
Internal Body Material	Stainless Steel - 304 grade (Standard Models), Stainless Steel - 316 grade (GMP Models)										
External Body Material	Powder Coated CRCA Steel (Standard Models), Stainless Steel - 304 grade (GMP Models)										
Noise Level	Less Than 65 db(A)										
Recommended Voltage Stabilizer	VS-02	VS-02	VS-03	VS-03	VS-03	VS-02	VS-03	VS-03			

Supply: 220-240 Volts, 50 Hz Single Phase.



#### Salient Features :

- Efficient CFC free insulation with high core density reduces temperature loss
- Optimized compressor run ensures energy efficiency
- Hot line across the door assembly to prevent frost formation
- Efficient CFC free dual refrigeration system ensures fast temperature pull down
- Quadruplicate step silicon rubber gasket for complete insulation
- Independent internal foamed doors with plastic handle
- Smart Handle with LED door closure indication
- Port for calibration probes / safety back up
- **Audio Visual alarms for**
  - Temperature high / low
  - Power failure
  - Door Open
  - Compressor on (only visual)
  - Power on (only visual)
- **Settable points of**
  - Temperature high / low
  - High / low temperature alarm point
- Rounded inner chamber for easy cleaning
- Attractive door profile
- Weight carrying capacity of each tray : 30 Kg Uniformly distributed
- Vacuum Release Valve for easy door opening.

#### Optional

- (i) Touch screen display ( TFT ) with additional features(Details overleaf)
- (ii) Validation protocol with IQ, OQ, PQ Documentation

REMI's new range of Ultra-Low Temperature (ULT) freezers are specially designed for faster temperature pull down & optimized cryopreservation. Highly sensitive microprocessor control ensures precise temperature management at -86°C. Recommended Ambient Temperature < 27°C.

**These cabinets are available in standard & GMP versions.**

## LCD Display

## Features

- 4 Inch attractive LCD display
- Intelligent Controller helps maintain temperature in case of sensor failure
- Battery Backup for Temperature Controller
- Auto tuning of controller
- Self-Diagnosis for errors
- Histogram format of 24 hours temperature recording
- Settable High / low alarm points
- Memory for storage of upto 1000 records
- Centronic interface to record Temperature, Date, & Time by attaching Dot Matrix printer with adjustable print interval
- Alarm on equipment / output for remote alarm

## Touch Screen Display

## Features

- 7 inch big colour touch screen
- PLC (Programable logic controller)
- Standby refrigeration (optional)
- Memory of 1500 records
- Centronic interface to record Temperature, Date & Time by attaching Dot Matrix printer with adjustable print interval
- Ethernet port
- Battery backup in case of power failure for display, alarms & off-line data logging (optional)
- Remi 'Datasoft' Data acquisition software complying to 21 CFR part 11 as per USFDA Guidelines (optional)

## REMI 'Data Soft'

## Features

- Multiple level alpha numerical password with password ageing
- Secured audit trail report
- Alarm report with mention of alarm condition
- Mean Kinetic Temperature able to be calculated for any days & alarm deviation report
- Reports in graphical and tabular form
- Data Stored in PC server with RS-485 connectivity and can be monitored on PC with password authentication
- Multi chamber data acquisition on single software
- Communication through RS 485 / TCP IP
- GSM Mobile Alert for six Numbers
- Power failure and resumption recorded with date and time

## Optional Accessories

## To be Ordered separately

- Data logger for 8 Point temperature recording with sensor printer interface and software
- Seven days circular chart recorder
- Software as per 21 CFR Part 11 requirements
- PLC Based Control System with HMI Touch Screen
- Biometrics Magnetic Door Access for Secured Door opening with software to maintain log
- Validation (mapping) consist of one cycle for temperature and humidity at any one set point for 24 hours on empty and loaded condition
- GSM alert through SIM card

## Technical Data

Particulars	ULT-90	ULT-185	ULT-360
Internal Volume (Liters)	90	185	360
No. of trays	2	3	6
No. of Internal Doors	1	2	4
Internal Dimensions W x D x H (mm)	400 x 400 x 580	510 x 510 x 730	700 x 510 x 1000
External Dimensions W x D x H (mm)	711 x 877 x 1405	820 x 987 x 1560	1010 x 987 x 1830
Operating Temperature Range	-45°C to -86°C		
Insulation (CFC free polyurethane foam)	Body : 150 mm sides, 300 mm Back, Door : 110mm		
Temperature Control	Microprocessor with PT-100 sensor		
Display	4" LCD		
Power Failure Alarm	Audio Visual Alarm		
Door Open Alarm	Audio Visual Alarm in case door open for over one minute		
Internal Body Material	S.S. 304 (AISI Grade, Non Corrosive, Non Magnetic)		
External Body Material	Powder Coated CRCA Steel		
Noise Level	Less Than 65 db(A)		
Battery Backup	Rechargeable, Back Up 8 hrs (for alarm system & temperature recorder)		
Recommended Voltage Stabilizer	VS-05	VS-06	VS-07

Supply: 220-240 Volts, 50 Hz Single Phase.

Ultra Low Temperature Freezers - (All for the safety of your samples).

REMI ULT Freezers models ULT-490 and ULT-650 with their environmentally friendly design incorporates the latest in cabinet, refrigeration, temperature control and monitoring features. They provide a safe and reliable performance to fulfill storage conditions in life science, biological, medical and other applications.

### Silent Features :

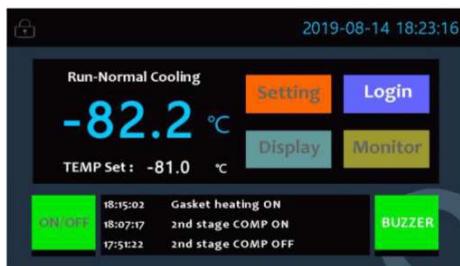
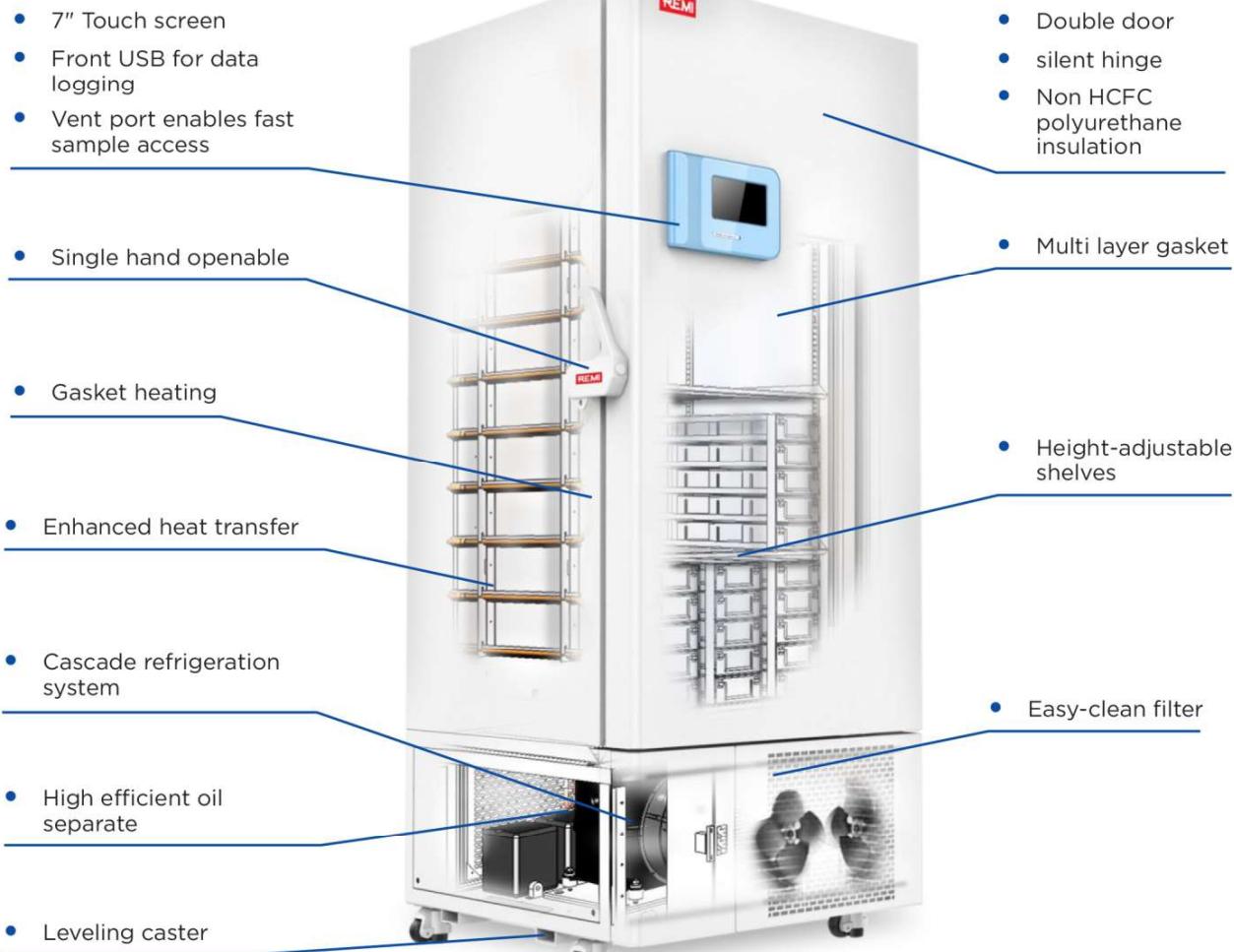
- Energy efficient design, Non CFC foamed in place urethane Insulation
- Multi color Touch screen display with Password ID recognition
- Front USB for data logging
- Graphic User Interface for temperature settings and alarms
- Vacuum Relief port for pressure equalization
- Exterior Door Gasket providing energy efficient thermal barrier and reduce frost build up
- Port for LN2/CO2 back up system (optional)
- 485 communications interface
- Remote Alarm Contacts



ULT-490

Technical Data		
Model	ULT-490	ULT-650
Temperature Range (°C)	-50°C to -86°C	
Nominal Capacity (Litres)	490	650
Inner door	4	
Shelves	3	
Controller type	Microprocessor, Touch Screen Display	
Minimal temperature (°C)	-86	
Screen Password	Yes	
Alarms available for:	Power failure, Sensor failure, Low Battery, Backup battery, High/low temperature, Door open, High condenser temperature, and Remote alarm.	
Exterior dimensions (mm) W x D x H	900x929x1990	1091x929x1990
Interior dimensions (mm) W x D x H	589x637x1310	780x637x1310
Recommended Voltage Stabilizer	VS-07	VS-07

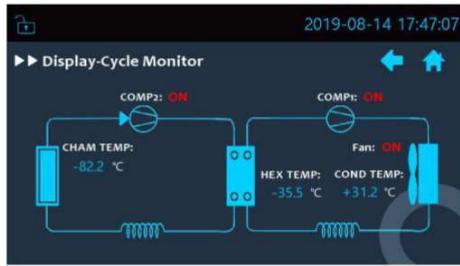
Supply: 220-240 Volts, 50 Hz Single Phase



Interface



User List



Cycle Monitor



Data Log



REMI Walk in chambers are designed for simulating, monitoring & control of environmental conditions like temperature & humidity. All these chambers are double walled & modular in construction, easy to assemble at site. They are available in standard sizes & can also be tailor made to suit specific requirements. Forced air circulation with the help of fan blower maintains uniform conditions. Use of intelligent control systems & dedicated REMI 'Datasoft' software complying to 21 CFR Part 11 requirements greatly enhances the performance. These chambers can be provided with standby refrigeration & humidity systems (optional) for uninterrupted functioning.

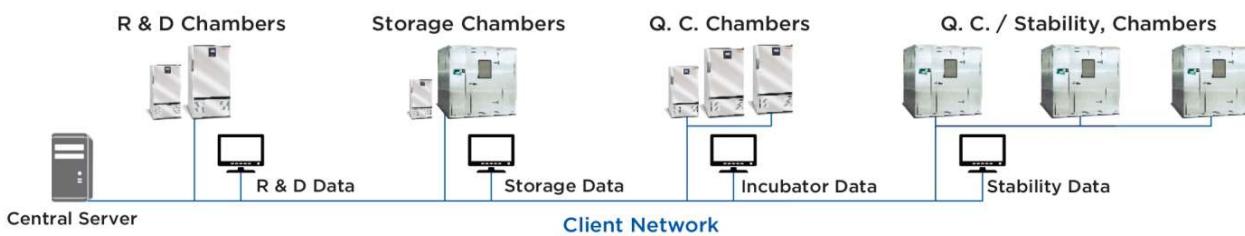
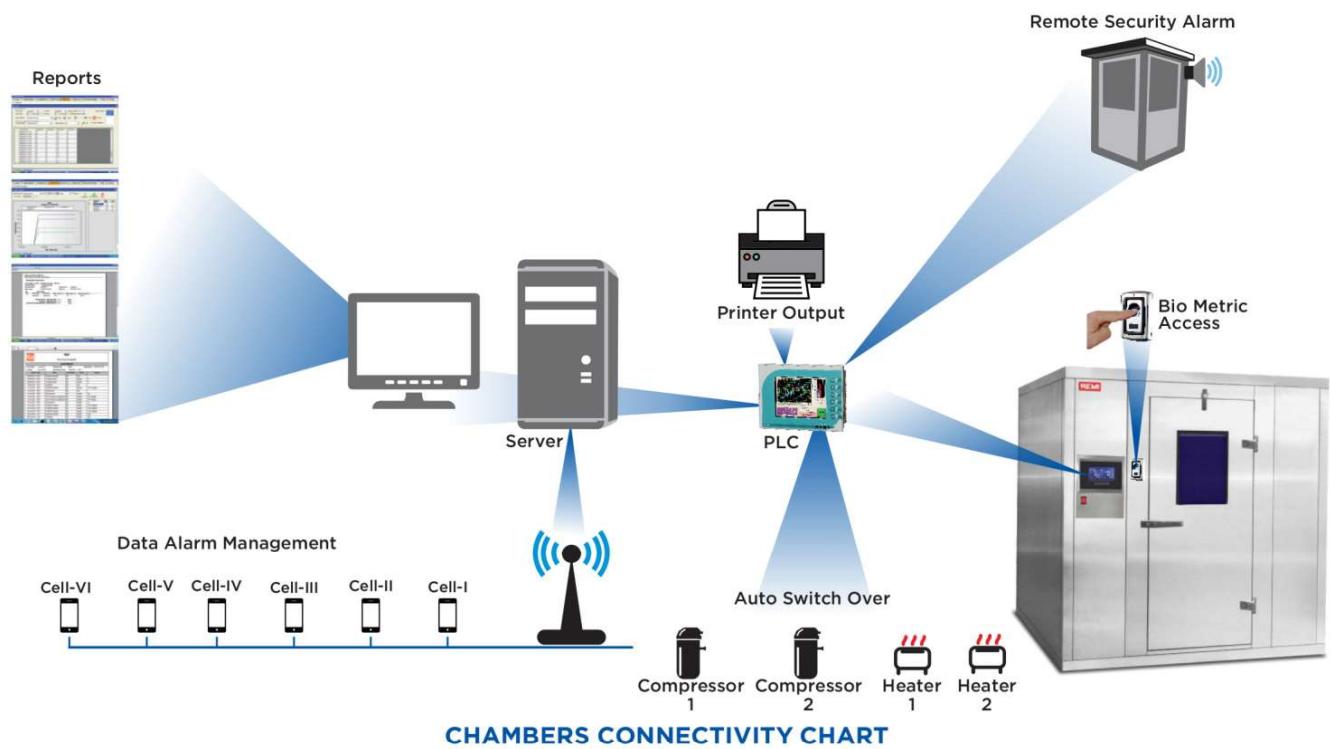
**CONSTRUCTION** • Double walled prefabricated modular panels with PUF insulation, easy to assemble at site • Standard model with inner of Stainless Steel (304 Grade) and outer Powder coated steel sheet • GMP model with inner (316 Grade) and outer of Stainless Steel (304 Grade) • CFC free Refrigeration system with split type condensing unit located outside lab helps to emit hot air beyond working area • Heating by long lasting SS tubular heaters • Humidity by steam injection. Boiler and water reservoir made of SS with heater and low water level cut off • Forced Air Circulation by heavy duty motor • SS racks and trays.

## Salient Features:

- Designed as per ICH guidelines to meet, WHO and USFDA requirement
- Fulfils storage conditions of 25°C-60% RH, 40°C-75% RH, 30°C-65% RH 25°C-40% RH
- Temperature Range: 20°C to 60°C, Accuracy: $\pm 0.2^\circ\text{C}$ , Uniformity: $\pm 1^\circ\text{C}$  (STABILITY CHAMBERS)
- Humidity range: 40% RH to 95% RH, Accuracy: $\pm 2\%$  RH, Uniformity: $\pm 3\%$  RH (STABILITY CHAMBERS)
- Temperature Range: 2°C to 8°C, Accuracy: $\pm 0.2^\circ\text{C}$ , Uniformity: $\pm 1^\circ\text{C}$  (COLD ROOMS)
- Microprocessor based auto tuning PID controller provided for precise control of temperature and humidity
- Auto change over to standby systems through PLC (Optional)
- Auto switch over to standby sensor in case of Controlling Sensor failure through PLC (Optional)
- Capacitance type Humidity sensor enables direct display of RH and temperature (STABILITY CHAMBERS)
- Audio visual alarm for temperature, humidity variations and utility failures
- Output for remote alarm in lab and at security gate
- Safety includes shut off of humidity and air heaters in case of temperature overshoots or undershoots beyond specified limits with alarms
- Facility to open the door from inside in case of door locked with emergency bell having switch inside chamber
- Low water level alarm and power cut off of boiler tank heater
- Overload cut off relay for compressor
- Time delay for compressor switch on
- PC communication via RS-485 and software complying to 21CFR part 11 USFDA guidelines (Optional)
- Data stored in PC server with RS-485 connectivity and password protection (Optional with software)
- PLC with touch screen HMI fully protected with password, instead of PID controller for precise control of temperature and humidity (optional)
- Standby refrigeration system available for uninterrupted functioning (Optional)
- Standby humidity system available for uninterrupted functioning (Optional)
- Multipoint Temperature and Humidity logger with printout facility (optional)
- GSM mobile alert in case of temperature and humidity deviations beyond specified Limits (Optional with software)
- Magnetic door lock system with biometrics for door access and software to monitor door open log (Optional)
- Validation protocol with IQ, OQ, PQ Documentation



- 1) Intelligent PLC/PID control system helps maintain highly accurate set parameters
- 2) Biometrics system for secured door access
- 3) Dual Capacitance type Humidity Sensors failure of one sensor automatically transfers regulation to other sensor
- 4) Chamber illumination by fluorescent tubes
- 5) PUF Insulation 80mm for maximum thermal protection
- 6) Spring Door Latch for door closure
- 7) Blower Motor for forced air circulation
- 8) Control panel with Data-logger, PC connectivity and electrical components
- 9) Standby refrigeration by Compressor-1 and Compressor-2
- 10) Standby humidity by Heater-1 and Heater-2
- 11) Emergency bell switch to open the door from inside
- 12) Highly ergonomic handle with unique multi lever key lock
- 13) SS Racks and Trays



## LCD Display

## Features

- 4 Inch attractive LCD display
- Intelligent Controller helps maintain temperature in case of sensor failure
- Battery Backup for Temperature Controller
- Auto tuning of controller
- Self-Diagnosis for errors
- Histogram format of 24 hours temperature recording
- Settable High / low alarm points
- Memory for storage of upto 1000 records
- Centronic interface to record Temperature, Date, & Time by attaching Dot Matrix printer with adjustable print interval
- Alarm on equipment / output for remote alarm

## Touch Screen Display

## Features

- 7 inch big colour touch screen
- PLC (Programmable logic controller)
- Memory of 9,000 records
- Centronic interface to record Temperature, Date & Time by attaching Dot Matrix printer with adjustable print interval
- Ethernet port
- Battery backup in case of power failure for display, alarms & off-line data logging (optional)
- Programmable cyclic timer for controlling illumination conditions
- Remi 'Datasoft' Data acquisition software complying to 21 CFR part 11 as per USFDA Guidelines (optional)
- Password protected door opening (Optional)

## REMI 'Data Soft'

## Features

- Multiple level alpha numerical password with password ageing
- Secured audit trail report
- Alarm report with mention of alarm condition
- Mean Kinetic Temperature able to be calculated for any days & alarm deviation report
- Reports in graphical and tabular form
- Data Stored in PC server with RS-485 connectivity and can be monitored on any PC with password authentication
- Multi chamber data acquisition on single software
- Communication through RS 485 / TCP IP
- GSM Mobile Alert for six Numbers
- Power failure and resumption recorded with date and time

## Optional Accessories

## To be Ordered separately

- Data logger for 8 Point temperature recording with sensor printer interface and software
- Software as per 21 CFR Part 11 requirements
- PLC Based Control System with HMI Touch Screen
- Biometrics Magnetic Door Access for Secured Door opening with software to maintain log
- Validation (mapping) consist of one cycle for temperature and humidity at any one set point for 24 hours on empty and loaded condition
- Standby Refrigeration System
- Standby Humidity System
- GSM alert through SIM card

## Technical Data

WALK-IN STABILITY CHAMBERS	WSC-50	WSC-80	WSC-100	WSC-120	WSC-150
WALK-IN COLD ROOM	WCR-50	WCR-80	WCR-100	WCR-120	WCR-150
Internal Volume (Liters)	5000	8000	10000	12500	15000
Number of Shelves	16	24	32	48	48
Internal Dimensions W x D x H (mm)	1250 x 2000 x 2000	2000 x 2000 x 2000	2000 x 2000 x 2500	2000 x 2500 x 2400	2500 x 2500 x 2400
External Dimensions W x D x H (mm)	1410 x 2360 x 2160	2160 x 2360 x 2160	2160 x 2360 x 2660	2160 x 2860 x 2560	2660 x 2860 x 2560
Internal Body Material	Stainless Steel 304 grade (Standard Models), Stainless Steel 316 grade (GMP Models)				
External Body Material	Powder Coated CRCA Steel (Standard Models), Stainless Steel 304 grade (GMP Models)				
Insulation	80 mm minimum, CFC free polyurethane foam				
Illumination	Fluorescent Tubes				
Control & Display	Microprocessor based PID control system with large 4" LCD Display				
Power Failure Alarm	Audio Visual Alarm				
Door Open Alarm	Audio Alarm in case door open for over one minute				

Supply: 220-240 Volts, 50 Hz Single Phase.

	Walk-In Stability Chambers	Walk-In Cold Rooms
Sensor	Capacitance type direct reading	PT-100
Temperature Range & Accuracy	20°C to 60°C, ± 1°C	2°C to 8°C, ± 1°C
Humidity Range (RH) & Accuracy	40% to 95%, ± 3% RH	xx
Audio Visual Variation Alarm	Set Humidity ± 3% RH, Set Temperature ± 2°C	Set Temperature ± 2°C

CO<sub>2</sub> incubators find applications in tissue engineered products, in-vitro fertilization, diagnostics, cancer research and other medical, pharmaceutical related industries. CO<sub>2</sub> incubators are used to culture cells to provide it with the optimum temperature, moisture (sterile environment) and to maintain optimum pH under a CO<sub>2</sub> atmosphere.

### Salient Features :

- Imported infrared CO<sub>2</sub> Sensor.
- CO<sub>2</sub> concentration Restoration Speed.
- Polished stainless-steel chamber, rounded corners for easy cleaning. Adjustable shelves.
- Microorganism Filter at Inlet provides 99% filtration of bacteria and dust ( $\Phi < 0.3\mu\text{m}$ ) and supplies pure CO<sub>2</sub> into the incubator.
- Door temperature controller prevents condensate water on glass door of incubator effectively.
- Independent audio-visual temperature limiting alarm system.
- Alarm function for temperature difference, CO<sub>2</sub> over concentration and concentration difference, door open time, UV working status.
- Automatic control of fan speed to maintain uniform temperature and prevent damage to samples.
- Hot air sterilizing circulation system.
- PID controller with large LCD screen ensures precise and reliable control



RCO-150 Plus

### Technical Data

Model	RCO-80 Plus	RCO-150 Plus
Chamber Volume (Liters)	80	150
Sensor	Infrared CO <sub>2</sub>	
Heating Method	Air-Jacketed, PID Control	
CO <sub>2</sub> Range	0~20% V/V	
CO <sub>2</sub> Control resolution	$\pm 0.1\%$ (IR sensor)	
Temperature Range	RT+5~55°C	
Temperature Stability	$\pm 0.1^\circ\text{C}$	
Humidity Method	Natural vaporization > 95%	
CO <sub>2</sub> Recovery	(Door open 30s, recovery to 5%) $\leq 3$ min	
Temperature Recovery	(Door open 30s, recovery to 37°C) $\leq 8$ min	
Shelves	2	3
Interior Dimension (mm) (W x D x H)	400x450x500	480X530X610
Exterior Dimension (mm) (W x D x H)	590x687x790	670x767x880

Supply: 220-240 Volts, 50 Hz Single Phase

## Blood Banking Equipments



Thawing Bath



Blood Collection Monitor



Benchtop Tube Sealer



Therapeutic Chair



Refrigerated Centrifuge



Platelet Incubator



Plasma Freezer



Blood Storage Cabinet

## Critical Care & Patient Support Equipments



Flabo - x



PRP Centrifuge



Mobile Transport Box



OmniCard 12c



OmniCard 12i

