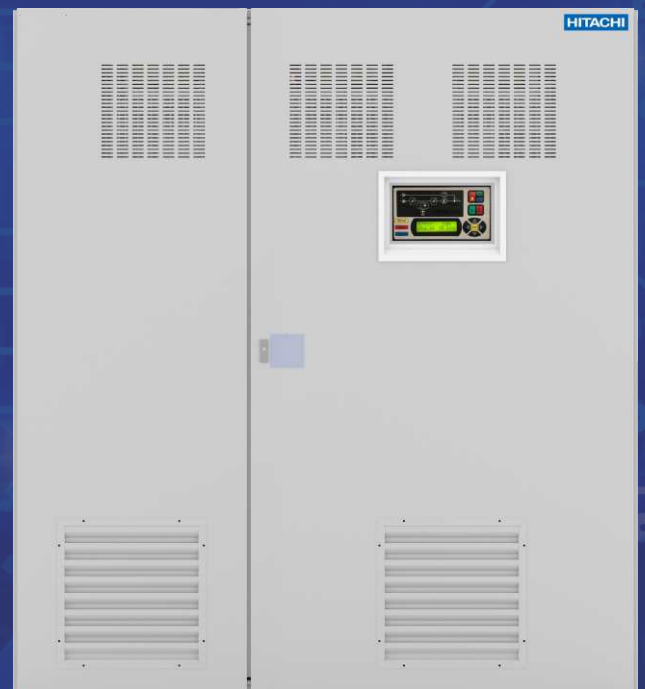


HITACHI
Inspire the Next

Three Phase Industrial UPS System

Range: 10 to 500 kVA

**i6 Series
UPS System**



Exceptional Safeguard Against Power Disruption

About i6 Series Three Phase Industrial UPS

Hitachi Hi-Rel Power Electronics Private Limited is a recognized name for high quality, proven technology and custom engineered Back-up and Power Conditioning solutions for critical applications across all segments of the industry. Being the first UPS manufacturer in the country to receive ISO : 9001 certification in 1987, Hitachi Industrial UPS systems are also IEC 62040-3 approved.

Benefits

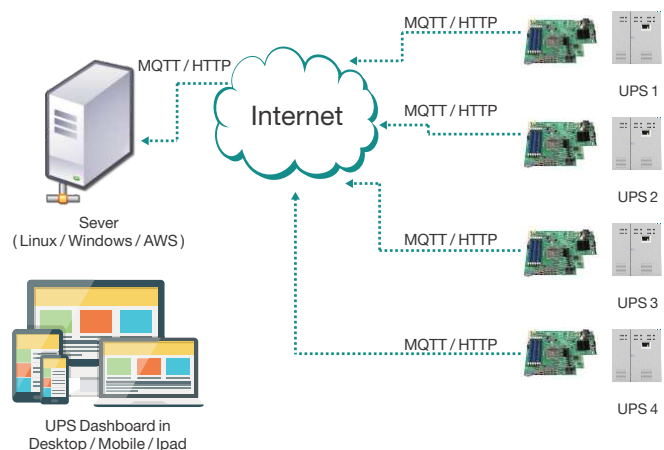
- Resilience for a Long Time
- Protects the Voltage Sensitive Device from Bad Electricity
- Suitable for rugged usage
- Reduce System Downtime
- Increase productivity
- Fresh Neutral at Output
- Battery Bank Safety
- User Friendly Access
- Huge Power Back Up in the Industries

Key Features

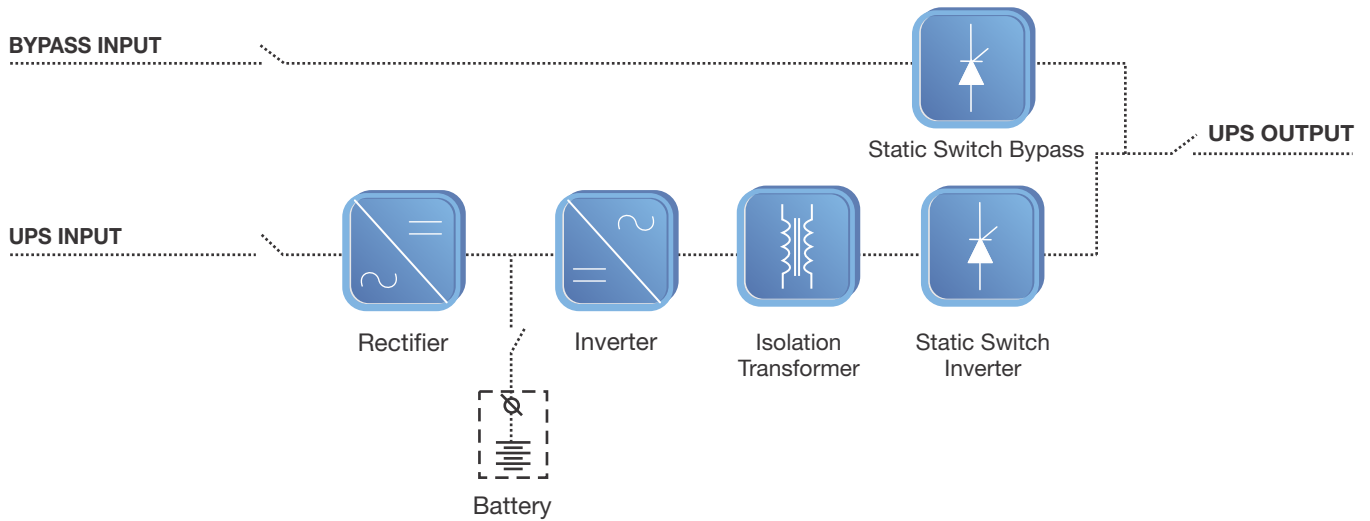
- Latest DSP controlled IGBT technology
- **Suitable for NON AC Environment (Dust Free)**
- In built Output Galvanic isolation
- Fully Electronics static switch for Inverter output as well as Bypass side
- Provision for separate bypass input
- Input Phase reversal protection
- Manual Bypass switch - Available
- True RMS power measurement facility
- Programmable automatic two stage charger compatible with SMFB & VRLA batteries
- Built-in advanced battery management system
- Highly efficient, latest and intelligent power device based inverter
- Capable to withstand 100% unbalance load.
- Extensive LED mimic with keypad
- LCD display keypad interface
- Date and time stamped event recording for last 999 alarms
- Programming and monitoring of various system parameters
- Make before break bypass operation.
- Terminals suitable for industrial grade Cu flexible cable

IoT Feature

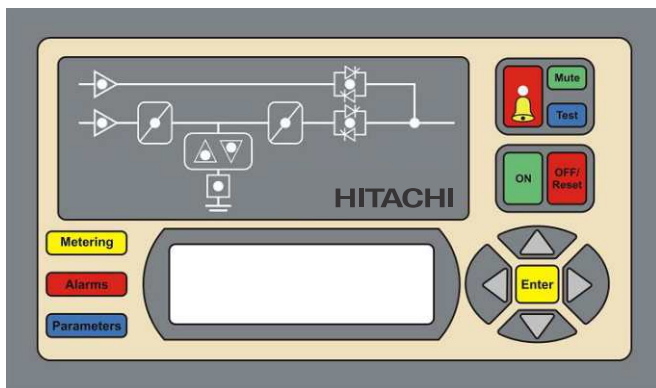
- Monitoring UPS health remotely over the internet
- Remote diagnosis
- Generate warning and alerts
- Uptime improvement
- Provide data for failure analysis
- Secure online tool for live UPS & battery health monitoring
- Numerical and graphical data presentation
- Report generation
- Notification of alerts through SMS/Email/Web App
- Data record retention



Single Line Diagram



LCD Display



METERS-DIGITAL-LCD DISPLAY

VOLTAGE METERS	Mains Alternate Battery Inverter Load
FREQUENCY METERS	Alternate inverter Output

MAJOR ALARMS-TEXT READOUT -LCD DISPLAY

INPUT	Under Voltage Over Voltage
DC	Over Voltage
BATTERY	Discharging Under Voltage End of Battery Discharge
INVERTER	Under Voltage Over Voltage IGBT Limb Fault Over load Over load Trip (Inverse Time) Over Temperature
ALTERNATE	Under Voltage Over Voltage frequency out of limit
STATIC SWITCH	Transfer to Bypass

Metering with true RMS measurement

CURRENT METERS	Mains Battery Inverter Load
POWER METERS	Load kVA Load kW Load Power Factor UPS kVA UPS kW UPS Power Factor

Note: All Alarms and trips initiate an audible warning

Technical Specifications

	Parameter	Specifications
MAINS INPUT	Voltage	415 V +10%, -15%
	Frequency	50 Hz ± 10%
DC BUS	Voltage	357 VDC to 476 VDC
	Maximum DC Bus Ripple	<1%
OUTPUT	Nominal Voltage	380-400-415 VAC, Three Phase + Neutral
	Load Power Factor Rated ^{#1}	0.8
	Load Crest Factor	3:1
	Voltage Regulation	
	Steady State	± 1%
	100% Step Load	± 5%
	Recovery Time to 98%	< 20 msec
	Over Load	
	110%	60 Minutes
	125%	10 Minutes
	150%	1 Minute
	Efficiency	up to 94%
	Frequency	50 Hz
	Bypass Synchronization Window	± 1% to 6 % (Field Programmable)
	Transfer Time	No Break in Sync mode / Async mode <10 ms
	Internal Oscillator	± 0.1%
	Slew Rate	1 Hz/Sec
	Waveform	Pure Sinusoidal
	Total Harmonic Distortion	
	Linear Load	<2.5% ON Linear Load
Nonlinear Load (CF 3:1)	<5% on NON Linear Load.	
OPERATING CONDITIONS	Ambient Temperature ^{#2}	40°C
	Audible Noise @1metre from PanelFront	55 dBA to 75 dBA (depending on system rating & system configuration)
ENCLOSURE	Construction	CRCA Steel Sheet
	Protection Class ^{#3}	IP 20
	Finish (Powder Coated)	RAL 7035 (Other Colours Optional)
	Ventilation	Forced Air (Internal Fans)
	Cable Entry	Bottom (upto 300 kVA) / Top (400 & 500 kVA)

#1 - Load Power Factor 0.9 (Optional), #2 - Ambient design for UPS Panel @ 50°C (Optional),

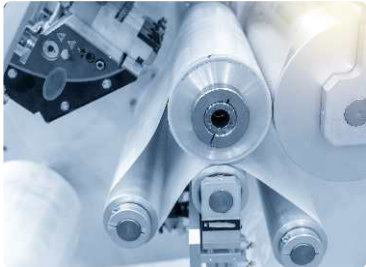
#3 - Provision for high ingress protection

Optional Features

- 12 Pulse rectification option
- ECO mode facility
- Vermin Proof UPS enclosure design option
- Optical fiber links used for Internal communication
- Cold start facility
- Back feed protection
- POT free contacts available for Remote signaling purpose
- Parallel Redundancy configuration with common / separate battery bank design
- Input Isolation Transformer
- Harmonics TRAP LC
- Bypass line equipment option (SCVS / CVCF)
- AC Distribution Panel
- PC Based Monitoring and Recording Unit
- Monitoring through SNMP
- Monitoring through Profibus
- RS 485 / Modbus Protocol
- IoT Enabled

Serving Entire Gamut of Industries

We have rich experience in supplying power electronics products for mission critical applications in various industries for critical data processing applications and back-up technology for demanding applications.



Plastic

- Extruder Machine
- Injection Moulding Machine
- Blow moulding Machine
- Pipe Extrusion Machine
- TAP Plants



Textile

- Yarn Machine
- (Warping Process)
- Knitting Machine
- BOPP, PPE
- Embroidery Machine



Automobile & Engineering

- CNC – VMC – HMC Machine
- Drilling & Grinding Machine
- Robotics & Automation



Printing & Packaging

- Multi-Layer Printing Machine
- Packaging Machine
- Digital Printing Machine



Pharma

- Formulation / API Process Machinery
- Laminar Air Flow (LAF)
- Air Handling Units (AHU)
- Lab Equipment



Sheet & Metal

- Punching Machine
- Banding Machine
- Laser Cutting Machine



Ceramic

- Kiln Machine
- Robotics
- Sizing & Policing Machine



Industrial Automation

- Airport Automation
- Process Control Equipment
- Transport Automation
- Railway and Road Transport Automation
- Robotics



Medical

- Magneto Resonant Imaging (MRI)
- CT Scanning / Cath Lab
- Multiple Medical Imaging Units
- Surgical Operation Theatre (OT's)

and many more...

Customer Support

“Have peace of mind with flexible and nimble footed, 24 X 7 service”

Our Service program includes:

On Site Installation supervision and commissioning

- Provides Comprehensive check at user site to ensure trouble free installation of product
- Our technical experts give recommendations to the site engineer or electrical contractor and supervise the UPS installation before load power-up
- Offers commissioning services along with site acceptance test report



Training

- On Site Training for safe & efficient operation of equipment
- Training at Factory (Optional)
 - Course-1 : Operation, system principle, hands on training, predictive and preventive maintenance – 3 days training
 - Course-2 : Predictive and preventive Maintenance, Hardware, Settings, UPS System panel & Batteries troubleshooting & repair services – 5 days training



Preventive Maintenance Services

- Ensures safe and reliable operation
- Contracts includes cleaning, measurements of various parameters, calibrations, functional tests, event log and power quality analysis, battery health check, hardware and software upgrades supported by Field Service Report.
- Maintenance Plan is one of the most cost-effective actions that can preserve initial investment and ensures business continuity.
- Ensure optimal performance and to protect critical application from potential downtime.

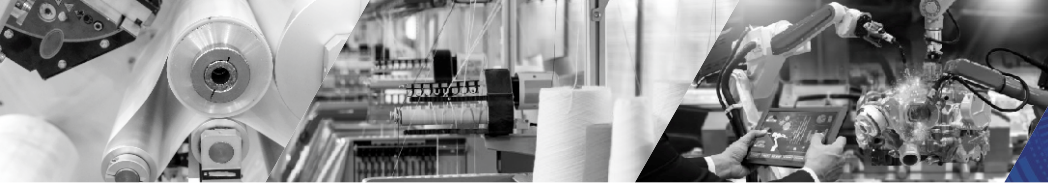


Break Down Maintenance & EMERGENCY CALL

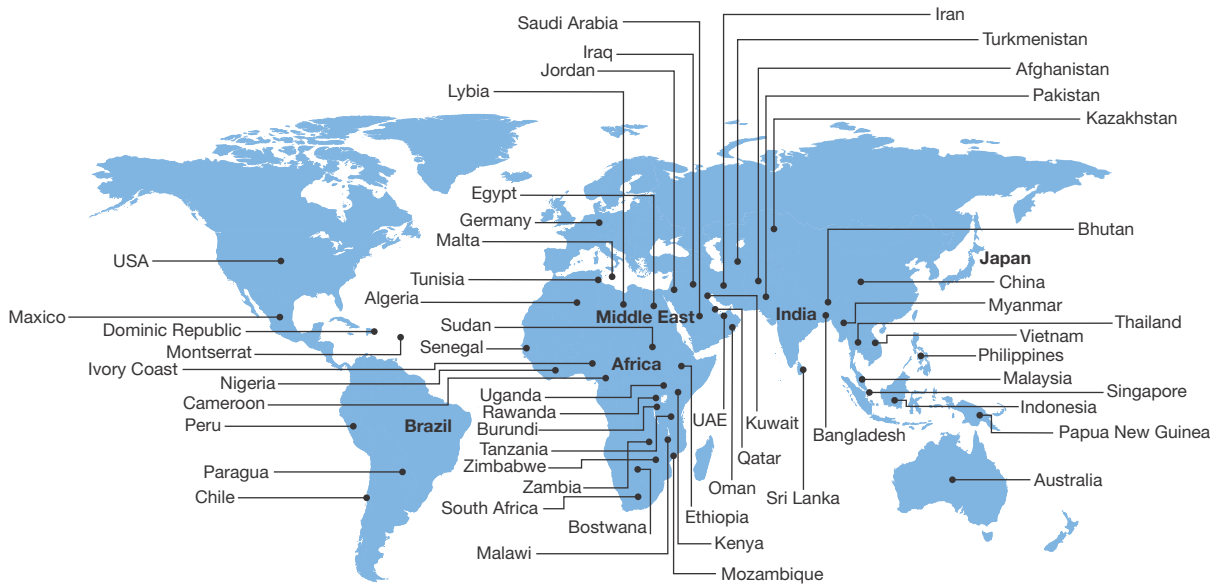
- In the event of an emergency call, our service expert, located as close to your site as possible, guarantees a quick intervention time with the help of 24x7-365 days.
- With the help of Power powerful diagnostics software, quick troubleshooting is possible by a service expert, which guarantees a short MTTR (Mean Time to Repair).
- Corrective actions are performed (Part replacement, adjustments and upgrades of software's etc.)
- Helpline Number for Service Support - (080) 6112 0800



*Service program are separate from equipment supply and subject to applicable terms and conditions.



Worldwide Presence



Pan India Presence



Contact us


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Tel: +91-2717-678777,
Fax: +91-2717-678700

 **Helpline Number:** (080) 6112 0800 (For Sales & Service)

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e-gallery