

Marine Outdoor UPS Solutions Uninterruptible Power Supply



- IGBT PWM Rectifier 3 Level Inverter Tech or Optional 6 Pulse or 12 Pulse
- 500 Real Time Event Log with 180 Detailed Parameters “Excel Output”
- User Friendly LCD Screen with Log Details and Real Time Records
- True On Line-Double Conversion Technology (Class VFI-SS-111)
- Easy Give Service and Updates and 15 Years Life Time Design
- Newest Technology High Efficient till %95 & Eco Mode %99
- %30 Small Dimensions Footprint & Easy Maintenance
- Input 0.99PF & Output = 0.8 or 0.9 or 1.0 Pf Possible
- Perfect Sinus Output & Precisely Electrical Protection
- Wide Input Voltage Range & Optional Dual Input
- Perfect Generator Compatibility & Auto Soft-start
- Lead Acid Batteries & NiCd Batteries & Lion
- Industrial & Commercial & Marine Application
- Optional 50Hz / 60Hz / 400Hz Input & Output
- Optional Customization Project & Client Oriented New Designs
- Optional Controllable Output Voltage from Screen 208V till 520V
- Optional SNMP & Dry Contact & Modbus & GSM & Network Manager
- Optional N+1 easy to build various redundancy till 8+1 & Load Sharing
- Optional Battery Connection Possibility & Optional Isolation Transformer
- Optional IP20 Indoor till IP65 or with Airconditioner & Cabinet or Container
- Hospitals, Factories, Power Plants, Marine, Petrol Rig, Off Shore



Petrol Platform Oil Ring



Harbor Vessel UPS



On Vessel UPS



Technical Advantages of UPS-GER

○ The UPS-GER Series An Advanced UPS Technology

UPS-GER Series is a true Online Double Conversion, new generation fully digital controlled UPS. It is designed with high efficiency and robust comply high availability power needs of a wide variety of critical applications and delivers advanced power solution with low cost of ownership.

○ High Performance Power Protection Designed for Maximum Efficiency and Flexibility

Equipped with its new IGBT rectifier or Pulse technology series keeps your critical loads protected while its space-saving compact design and front access for maintenance successfully reduce mean time to repair (MTTR). Thanks to the wide variety of accessories and options UPS-GER Series presents maximum flexibility advantage to users and optimizes total cost of ownership.

○ DSP Power Factor Corrected IGBT Rectifier

IGBT based power factor correction technology provides Input Power Factor close to 1 (≥ 0.99) and keeps Input Current Total Harmonic Distortion (THDi) less than 2% for 3 Level technological UPS that helps to avoid the disturbance.

○ Low Input Current THD

(THDi) less than %2 avoids the disturbance to connected loads, For Pulse Solutions up to %11.

○ Digital Control System

All of the control functions for UPS Industrial Series UPS including power-on, start-up control, input stage power factor, battery management control, If needed battery charging and boosting control ,output stage ac voltage regulation and shut-down control, can be realized by using a single DSP control board.

○ High Input Power Factor

0,99 Input power factor ensures clean and sinusoidal input current. The high input power leads to reduced electricity pay-out, minimizes cable, switchboard, fuse and generator requirements ,thus reducing investment cost.

○ High Efficiency & Low Total Cost of Ownership

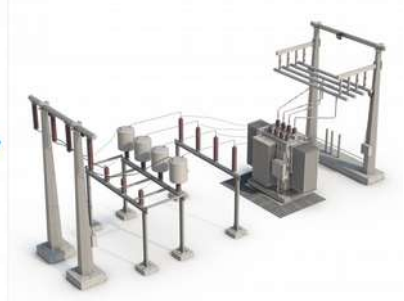
With its high efficiency up to 95% UPS-GER Series UPS consumes less energy to supply the loads. Thanks to this high efficiency rate, the percentage of energy that is produced as heat is reduced to a minimum. As a result of decreased heat emission users can reduce their electricity usage and air conditioning requirements.

○ Flexibility of The UPS

UPS-GER is compatible with wide range of application. Flexibility achieved through many choices, if needed battery, single or multi-unit configuration, accessories and options.

Isolation transformers to vary neutral connectivity in the event of separate power sources or for galvanic isolation between input and output.

Customized dimensions if needed for your projects till IP66



Technical Advantages of UPS-GER

Optional: Auto Restart

When UPS will reach its end of discharge or with-out energy, So the UPS will shut down.

The UPS will automatically restart and enable output power:

- After utility power is restored
- After the "Auto Start Delay Time" is expired (the default delay is 5 minutes) .

EPO(Emergency Power Off)

EPO function is designed to switch off the UPS in emergency conditions (fire, flood, etc.). The system will turn off the rectifier, inverter and will stop powering the load immediately (including the inverter and busbar).

Reverse Energy for Regenerative Loads

The UPS for industrial application can be used with regenerative loads, such as synchronous motors. The regenerative loads pump the energy back to mains, traditional systems burn this feedback energy and this causes lower efficiency. UPS-GER series with IGBT rectifier are able to absorb intermittent load generated power. Additionally, this reverse power tolerance permits execution of important system operations like closed transition transfers of the UPS load directly to an engine generator source if connected.

Advanced User Interface

The UPS has large and user-friendly 320x240 LCD display that provides operating information in four different languages. Thanks to this advanced LCD display all parameters of working device can be monitored and controlled. UPS Is capable of recording up to 500 events and 180 Parameters / event.

Optional Parallel Operation

Uninterruptible power supply UPS-Mak series features easy and simple scalability and redundancy. It is ready to grow with your business demands. Different power rated units and any number of UPSes can be connected in parallel. Power increase. The UPS's can be connected in parallel or one solution waits and the other one to increase total capacity of the system. If one of the devices goes out of order, the other machine will take over the load immediately or as optional as well the critical loads are transferred to loads with control to other UPSes.

Optional Parallel Operation Features :

- Internal standard parallel microprocessor for all models.
- Up to 16 units parallel able as customized.
- Parallel connection with ring cable
- Auto-sensing disconnected parallel cable
- Equal current share with DSP control
- Optional power upgrade with 30milisecond interruption or without any interruption
- All parallel systems can be controlled from the front panel of one unit
- Full synchronization of parallel units
- Isolated parallel operation card
- The power increasing solution with transfer contactors

Advanced Battery Management

UPS-GER Series guarantees enhanced battery life and maximizes battery performance, life span and reliability through intelligent precision charging.

Temperature compensated battery charging monitors performing measurement of external and internal battery temperature and adjusting the charge current rate accordingly.

Advanced battery management provides real-time information about battery capacity and back up time, this information can be seen on LCD panel.

The Ups tests the batteries at adjustable periods without switching off the system, the test periods can be set by users.

