

BORRI ROTATION

TECHNICAL SPECIFICATIONS • 1kVA -3kVA



SPECIFICATIONS	1kVA	2kVA	3kVA
INPUT			
Voltage Window	160-280 VAC	160-280 VAC	160-280 VAC
Frequency	50 Hz +/- 5	50 Hz +/- 5	50 Hz +/- 5
Phase / Wire	single phase plus ground	single phase plus ground	single phase plus ground
Power Factor	> 0.99	> 0.99	> 0.99
Current THD (100% Linear)	< 5%	< 5%	< 5%
OUTPUT			
Voltage Window	220/230/240 VAC	220/230/240 VAC	220/230/240 VAC
Voltage Regulation	+/- 1%	+/- 1%	+/- 1%
Capacity	1000VA / 700W	2000VA / 1400W	3000VA / 2100W
Rated Power Factor	0.7	0.7	0.7
Wave Form	Sine Wave	Sine Wave	Sine Wave
Frequency Regulation	+/- 0.1%	+/- 0.1%	+/- 0.1%
Transfer Time	0msec	0msec	0msec
Crest Factor	3:1	3:1	3:1
Efficiency AC-AC	> 95%	> 95%	> 95%
DC Start	YES	YES	YES
BATTERY			
Type	Sealed Lead Acid, Maintenance Free		
Quantity	3	6	6
Voltage	36 Vdc	72 Vdc	72 Vdc
Recharge Time (typical)	3 hours to 90%	3 hours to 90%	3 hours to 90%
DISPLAY			
Status on LCD	Line, Back-up, ECO Mode, Bypass Supply, Battery Low, Disconnect Battery, Overload		
Readings on LCD	Input /Output Voltage, Input/Output Frequency, Load Percentage, Battery Voltage & Internal Temperature		
Self-Diagnostics	Upon power-ON, Front Panel Setting & Software Control, 24-HOUR Routine checking		
ALARMS			
Audible and Visual	Line Failure, Battery Low, Transfer to Bypass, System Fault Conditions		
PROTECTION			
Overload	< 105% continuously, 121%-150% 10 seconds		
Short Circuit	Yes	Yes	Yes
Overheat	AC: Switch to Bypass	AC: Switch to Bypass	AC: Switch to Bypass
Battery Low	Alarm and switch off	Alarm and switch off	Alarm and switch off
PHYSICAL			
Dimensions (WxDxH)	440x405x88 (2U)	440x405x88 (2U)	440x405x88 (2U)
Net Weight	16	28	30
Outlets	6 x IEC320-C13	6 x IEC320-C13	4xIEC320-C13&ITEC326-C19
QUALITY			
Quality Assurance	ISO9001 Certified	ISO9001 Certified	ISO9001 Certified
Safety Standard	EN62040-1-1	EN62040-1-1	EN62040-1-1
EMC Standard	EN62040-2	EN62040-2	EN62040-2
Marks	CE, UL	CE, UL	CE, UL

The data and text contained within this brochure are for general information only and can not be deemed as definitive, specifications can change without notice.



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BORRI ROTATION
 1kVA - 3kVA • ON LINE DOUBLE CONVERSION

ROTATION

1kVA - 3KVA



The Rotation Series is the ideal power protection solution well suited for Server, Network, EPO's, CCTV, Telecommunications, Industrial and Medical Diagnostic Equipment.* Offering comprehensive functionality the Rotation Series can be adapted for almost any application which includes free standing or rack installations.



Super Compact Convertible Design

The compact design of the Rotation Series means it occupies less space in a 19" rack than its equivalent competitor, with the help of an optional mod kit the U-Series can also be used in 21" cabinets.

When being used as a floor standing UPS feet are supplied to enhance stability.



“ The patented technology allows the RS232, USB and SNMP to be activated simultaneously. ”

Emergency Shutdown Control

Allows the user to shut down the UPS through the EPO (Emergency Power Off) in the event of an emergency.



Comms Option Slot

The comms slot allows flexibility in Network Configuration. Optional cards include 2nd RS232 serial port, 2nd USB, dry contact for BMS applications, SNMP for web functionality.



Standard Properties

- Rack / Tower Design
- Advanced Digital Control
- Wide Input Voltage
- Customer Options Slots
- Optional External Manual Bypass
- Hot Swappable Battery
- Extended Runtime Capability
- Super Compact Convertible Design

Double Conversion On-Line Technology

Line Interactive or Off line UPS feed the mains directly or indirectly via a transformer to the load, this has the advantage of slightly increasing efficiency but at the cost of exposing the connected equipment to an unregulated or semi regulated supply. Under mains fail conditions both these technologies create a break in supply, when engaging or disengaging the batteries, typically 7 to 20ms. With Double Conversion, your load never sees a break and is always supported by a regulated supply.

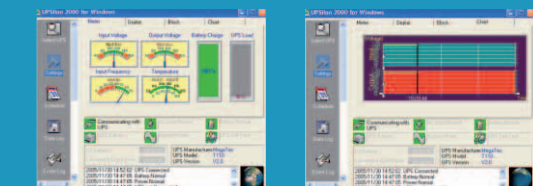
UPS Software

UPSilon software is bundled with the Rotation Series offering the facility to manage and control key elements of the UPS via both USB and Serial ports, an optional SNMP connector is also available.

A **patented feature** of the Rotation Series is that both USB and Serial ports can be used at the same.

Optional SNMP Features:

- Remote testing for all key UPS features
- Communicate via SNMP/web/network adaptor
- Access via Web
- Alert function via SMS and email



Tower/Rack Wall Mount Design

The Rotation Series can be used as a free standing or rack mounted UPS, it performs both these topologies with equal ability. The power to size ratio of the Rotation Series makes it a great favorite with IT rack builders and designers.

Advanced Digital Control Technology

Being a fully digitized UPS allows the Rotation Series to react with incredible speed to any threat presented to the load, this same technology also gives the Rotation Series a very high degree of reliability and durability.

Wide Input Frequency & Voltage Windows

The Rotation Series will accept a large variation in both input voltage and frequency, this is all achieved without reference to the batteries thus cell life is dramatically increased.

Note: Most leading brands of "Line Interactive" and "Off Line" UPS invariably have to draw energy from the batteries to assist in voltage and frequency regulation, this in turn shortens battery life.



Programmable Receptacles

Performance of the Rotation Series can be customised to suit your needs. Of particular interest is the ability to shutdown nominated output sockets under mains fail conditions, this feature allows the client to decide which load can be shed in order that more critical equipment can run longer. Note that each bank of output sockets can have a nominated run time applied to them via the management software, it's all done on the click of a mouse.

Power Factor Corrected

To fall in line with modern day power supply equipment the Rotation Series is fitted, as standard, with input Power Factor correction.

This ensures that current and voltage are drawn in unison, typically .99, this discreet technical specification guarantees real energy savings.



Quick Glance LCD Screen



Provides easy reading of major system parameters and status including load level, remaining battery load and fault conditions.

Maintenance By Pass Switch

As would be expected from any quality UPS the Rotation Series comes fitted with an integral static by pass facility, however for added security an optional external by pass switch can be added. The external switch allows for the removal of the UPS during maintenance without disturbance to the load. Once fitted the switch will monitor temperature and will trigger in the event of a serious threat.



Matching Battery Cabinet

Extended run times are easily achieved with the adding of matching battery cabinets, each cabinet connects easily to either the UPS or another battery box via rear mounted DC connectors.

Fast Battery Recovery

The Rotation Series offers probably the fastest battery recovery time of any UPS in today's market. Having a powerful digitally controlled 4amp charger (1 to 1.5Kva) recovery time from discharge can be as low as 3hours to 90%.

Extended Runtime Capability

Enables users to connect additional battery banks by simply plugging in the battery connectors between the UPS and battery banks without the need for additional chargers.



* Isolation Transformer Optional Extra