

SENTINEL XR 3.3KVA-10kVA Single Phase Uninterruptable Power Supply



Absolute Protection

Sentinel XR is a range of UPS with on-line double conversion technology and with zero transfer time. The load is always powered by the inverter, which supplies a true sinusoidal voltage and current free from electrical interference.

Maximum Versatility

Sentinel XR can either be floor or 19' rack mounted. The UPS can be converted from the Tower version to the Rack version simply by rotating the control panel by 90° and installing the handles.

Easy Battery Replacement

The batteries can be replaced while the UPS is working off the Inverter (hot swap replacement) without any disturbances to the load.

Standby

When the UPS is not used, it can be set to stand-by mode. The inverter will be switched off and the battery is kept charged. This operating mode is suitable for Emergency Escape Lighting (CPSS- Central Power Supply System) as per standard EN 50171.

Communication Slot

Sentinel XR is provided with an expansion slot for optional communication cards that enable the UPS to communicate using the main communication standards such as: RS232 port, serial port duplexer, Ethernet network agent with TCP/IP, HTTP and SNMP protocol, RS232 + RS485 port with JBUS / MODBUS protocol, volt-free relay card.

Advanced Communication

The EPI Watch & Save software ensures effective and intuitive management of the UPS. Important information such as the input and output voltage, the load applied, the remaining back-up time, is displayed in the form of bar graphs. The software is able to provide information even in the event of a failure, and can also programme the UPS for automatic weekly start-up and shutdown.

Extending Backup Time

Battery expansion is available to increase the back-up time of the UPS. Battery chargers can be used to reduce recharging times.

Advanced Diagnostics

A backlit display provides the most important measurements relating to the UPS.



Four Operating Modes

- On Line (VFI): The load is powered by the Inverter and the output power supply is independent from the input supply voltage and frequency fluctuations.

- Eco Mode: To optimise the efficiency the load is powered from the mains as preferred source. If the mains voltage exceeds the tolerance values, the UPS switches to the normal on line double conversion operating mode.

- Smart Active:
When the utility power quality is unstable it can be difficult to decide the best operating mode between on line or ECOMode. The Smart Active function solves this problem as it selects the best operating mode dependent on the input power quality.

- Stand-by-off:
When mains power is available the UPS will not power the load; when mains is not available the UPS will power the load using the battery power supply. This feature makes the UPS ideal for emergency lighting power supply.

Programmable Output Socket

Using UPSTools configuration software it is possible to set the cut-off sequence of the output sockets. It is a very important feature in emergency conditions to be able to classify the loads by different priorities.

Manual By-Pass

The by-pass circuit allows UPS maintenance to be performed without disrupting the load.

Applications

Servers, Local Area Networks (LAN), datacentres, telecommunications, industrial equipment, electro-medical equipment, Emergency Lighting.

Model Range

Power (VA)	Model	Dimensions WxDxH (mm)	Weight (kg)
3300	XRM 3300	175x520x455 tower / 19"x520x4U rack	38
4000	XRM 4000	175x520x455 tower / 19"x520x4U rack	38
5000	XRM 5000	175x660x455 tower / 19"x660x4U rack	64
6000	XRM 6000	175x660x455 tower / 19"x660x4U rack	64
8000	XRM 8000	2x (175x660x455) tower / 2x (19"x660x4U) rack	94
10000	XRM 10000	2x (175x660x455) tower / 2x (19"x660x4U) rack	95

Specifications

INPUT	XRM3300	XRM4000	XRM5000	XRM6000	XRM8000	XRM10000
Voltage	220 - 230 - 240 V					
Voltage without battery use	164 V @ 100% load (84 V @ 50% load)					
Voltage tolerance	0-276 V					
Input frequency	40/72 Hz					
Power factor	> 0.98					
Input phases	1					
BYPASS	XRM3300	XRM4000	XRM5000	XRM6000	XRM8000	XRM10000
Voltage tolerance	180 - 264 V (selectable in Economy Mode and Smart Active Mode)					
Frequency tolerance	Selected frequency $\pm 5\%$ (user configurable)					
BATTERIES	XRM3300	XRM4000	XRM5000	XRM6000	XRM8000	XRM10000
Battery blocks	12V/7Ah			12V/9Ah		
Batteries number	9		16		20	
OUTPUT	XRM3300	XRM4000	XRM5000	XRM6000	XRM8000	XRM10000
Rated power	3300 VA	4000 VA	5000 VA	6000 VA	8000 VA	10000 VA
Active power	2300 W	2400 W	3500 W	4200 W	6400 W	8000 W
Phases number	1					
Waveform	Sinewave					
Rated voltage	220-230-240 V (selectable)					
Voltage distortion	< 3% with linear load .< 6% with distorting load					
Frequency	50 / 60 Hz selectable					
Crest factor	3 : 1 (up to 100% load)					
Output phases	1					
Output sockets	1x 16A IEC and 2x 10A IEC		IN/OUT terminal board and 2x 10A IEC			
SYSTEM	XRM3300	XRM4000	XRM5000	XRM6000	XRM8000	XRM10000
Transfer time	0 ms (2 ms Eco mode)					
AC/AC efficiency	90% (98% in line-interactive/smart-active mode)					
Noise	< 40 dBA at 1 m					
Operating temp.	0°C / +40°C, optimal for batteries +15°C/+25°C					
Protections	Overcurrent, short-circuit, excessive battery discharge, overvoltage, undervoltage, overtemperature					
Communication slot	RS232 + communication slot (TCP/IP, HTTP, SNMP, JBUS, MODBUS, PROFIBUS)					
Accessories Included	2x 10A output cords; 1x plug IEC-16A; software; serial cable					
Colour	Dark grey					
Standards	Safety: EN 62040-1-1, Directives 73/23EC and 93/68/EC; EMC: IEC 62040-2; EN 50091-2, Directives 2004/108/EC and 89/336/EC; EN 62040-3					
Technology	On-line double conversion					
Weight (kg)	38 Kg		64 Kg		94 Kg	95 Kg
Dimensions (WxDxH) mm	175x520x455 tower 19"x520x4U rack		175x660x455 tower 19"x660x4U rack		2x(175x660x455) tower 2x(19"x660x4U) rack	
OVERLOAD	XRM3300	XRM4000	XRM5000	XRM6000	XRM8000	XRM10000
100% <Load< 110%	1'					
100% =Load< 150%	4"					
Load> 150%	0.5"					
DATA	XRM3300	XRM4000	XRM5000	XRM6000	XRM8000	XRM10000
Full load back up time	6 Min.		10 Min.	8 Min.	6 Min.	

Form factor	Tower & Rack					
OPTIONS	XRM3300	XRM4000	XRM5000	XRM6000	XRM8000	XRM10000
Battery cabinets for longer runtimes	Yes					
Auxiliary serial connection	Yes					
Communication software	Yes					
OPTIONS	XRM3300	XRM4000	XRM5000	XRM6000	XRM8000	XRM10000
MultiCom 351	x	x	x	x	x	x
MultiCom 352	x	x	x	x	x	x
MultiCom 301	x	x	x	x	x	x
MultiCom 302	x	x	x	x	x	x
NetMan 101 Plus	x	x	x	x	x	x
NetMan 102 Plus	x	x	x	x	x	x
MultiCom 362	x	x	x	x	x	x
MultiCom 372	x	x	x	x	x	x
MultiCom 382	x	x	x	x	x	x
Multi I/O	x	x	x	x	x	x
IRMS Multi-Switch	x	x	x	x	x	x
AS/400 interface kit	x	x	x	x	x	x
External by-pass cabinet rack 16A	x	x				
Profibus DP Gateway	x	x	x	x	x	x