

POWER

harland simon
power solutions



Novus FXM UPS Series

Outdoor UPS with 650, 1100, or 2000 W/VA Output



Novus FXM UPS

- Clean, uninterruptible backup power ensures your system will remain running during power outages
- Wide range Automatic Voltage Regulation without going to batteries lengthens battery life, even during periods of surge or sag in the line voltage
- External communications via RS-232 port or (optional) SNMP Ethernet interface provides local or remote monitoring and control
- Independently programmable and dry contact relays allow tracking and controlling of key functions
- Event and alarm logging with time and date stamping simplifies and accelerates troubleshooting
- A wide operating temperature range of -40 to 74°C (-40 to 165°F)¹ is suitable for the most extreme operating environments
- Control and power connection panels can be rotated for mounting and display in any orientation² for viewing convenience
- Temperature compensated battery charging protects batteries from over charging at extreme temperatures extending the life of the battery

The Novus FXM UPS Series provides constant, reliable backup power for Traffic, Security and Telecommunications applications. The Automatic Voltage Regulator (AVR) provides power stability in unpredictable environments and constant voltage during varied power conditions. The Novus FXM UPS Series instantly switches to emergency backup power during utility power failure or interruptions. Each power level is available in either North American (120 V) or International (230 V) variants, both with auto-frequency (60Hz/50Hz).

¹ Power module only. Output power derates after 55°C for FXM 650 and 1100, and after 50°C for FXM 2000.

² The LCD panel on the FXM 650 cannot be rotated.



Novus FXM UPS Power Modules

Nominal Specifications

Power Module:	FXM 650		FXM 1100		FXM 2000	
	North America	International	North America	International	North America	International
Nominal voltage:	120VAC	230VAC	120VAC	230VAC	120VAC	230VAC
Nominal frequency:	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz
Input current*:	8.7A	4.5A	15.5A	8.0A	20A	12A
Output current:	5.4A	2.8A	9.1A	4.78A	16.6A	8.69A
Output power at 50°C:	650W/VA	650W/VA	1100W/VA	1100W/VA	2000W/VA	2000W/VA
Output power at 74°C:	500W/VA	500W/VA	850W/VA	850W/VA	1500W/VA	1500W/VA
Battery string voltage:	24VDC	24VDC	48VDC	48VDC	48VDC	48VDC

* At nominal input voltage in and 10A battery charger

General Specifications

Performance

Input voltage range	
120VAC:	85 to 175VAC* (to 150VAC for FXM 2000)
230VAC:	150 to 328VAC* (to 281VAC for FXM 2000)
Output voltage	
Regulation:	±10% over full input voltage range
Waveform:	Pure sine wave
Typical efficiency (full resistive load):	>98%
Typical output voltage THD:	<3%
Typical transfer time:	<5ms
Audible noise @ 1m:	45dBA

*Without going to batteries

Environmental Specifications

Operating temperature:	-40 to 74°C (-40 to 165°F)*
Storage temperature:	-40 to 75°C (-40 to 168°F)
Operating altitude**:	12,000ft/3658m
Operating humidity:	Up to 95%

*Output power for FXM 650 and FXM 1100 is derated by 1.25% per every degree Celsius above 55°C. Output power for the FXM 2000 is derated by 1.0% per every degree Celsius above 50°C.

**Derate 2°C per 1000ft (305m) above 4500ft (1370m)

Mechanical Specifications

	FXM 650	FXM 1100	FXM 2000
Width (in/mm):	17/432	15.5/394	15.5/394
Height (in/mm):	3.47/88	5.22/133	5.22/133
Depth (in/mm):	9/229	8.75/222	8.75/222
Unit weight (lb/kg):	25/11	35/16	35/16

Standard Features

Automatic Voltage Regulation (AVR)
Automatic frequency sensing (60Hz/50Hz)
Remote monitor and control communications options:
Standard RS-232 serial port or optional internal SNMP Ethernet interface
Novus User Software: A user friendly Windows™ based GUI
Emergency Power Off (EPO) input
Variable speed fan with fan failure alarm
Circuit breaker protection on the input and external battery input
Three mounting configurations: wall, shelf or rack
Generator-ready for extended runtime option
Three user inputs: self test, alarm, shutdown
User adjustable charger (off, 3 A, 6 A, 10 A), 10A default
100 historical events logged with time/date stamping
24 month warranty

Shelves

Electrical safety:	UL1778, CSA 22.2 No 107.3-03
Marks:	CSA _{US} /CE*
EMI:	Class A FCC/CISPR [EN 50091-2:1995]

*CE applies to 230 VAC version only



FXM 650

The power connection panel and the control panel can be rotated for ease of connection and use in any mounting position.