

# Power

## Alpha FXM 650, 1100, 2000

Ruggedized Uninterruptible Power Supply Modules



*Alpha FXM 2000*

- 650 W/VA, 1100 W/VA and 2000 W/VA uninterruptible power supply modules for a variety of power requirements and applications
- Ruggedized design offers a wide operating temperature range of -40°C to 74°C (-40°F to 165°F)\* for the most extreme operating environments
- Independently programmable dry contact relays allow tracking and controlling of key functions
- External communications via RS-232 port or optional Ethernet SNMP communication interface provides local or remote monitoring and control
- Wide Automatic Voltage Regulation range allows continuous operation without transferring to backup mode during voltage surge or sag

**The Alpha FXM uninterruptible power supply (UPS) modules provide clean, reliable power control and management as part of a complete UPS solution.** Each model is available in either North American (120V) or International (230V) variants, both with auto-frequency (60Hz/50Hz). Automatic Voltage Regulation (AVR) provides power stability in unpredictable environments and constant voltage during variable power conditions. Temperature compensated battery charging protects batteries from over charging at extreme temperatures, extending battery life. Event and alarm logging with time and date stamping simplifies and accelerates troubleshooting. Control and power connection panels can be rotated for mounting and display in any orientation\*\* for viewing convenience.

\* Power module only. Output power derates after 55°C for FXM 650 and 1100, after 50°C for FXM 2000. (120 VAC), and after 55°C (230VAC)

\*\* The LCD panel on the FXM 650 cannot be rotated.

# Alpha FXM Uninterruptible Power Supply Modules

## Nominal Specifications

Power Module:	FXM 650			FXM 1100		FXM 2000	
	North America	North America	International	North America	International	North America	International
Nominal voltage:	120VAC	120VAC	230VAC	120VAC	230VAC	120VAC	230VAC
Nominal frequency:	60Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz
Input current*:	8A	10.5A	4.5A	16A	8.0A	20A	12A
Output current:	5.4A	5.4A	2.8A	9.1A	4.78A	16.6A	8.69A
Output power at 50°C:	650W/VA	650W/VA	650W/VA	1100W/VA	1100W/VA	2000W/VA	2000W/VA
Output power at 74°C:	500W/VA	500W/VA	500W/VA	850W/VA	850W/VA	1500W/VA	1500W/VA
Battery string voltage:	24VDC	48VDC	24VDC	48VDC	48VDC	48VDC	48VDC

## General Specifications

### Performance

Input voltage range	
120VAC:	85 to 175VAC* (to 150VAC for FXM 2000)
230VAC:	150 to 328VAC*
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 transferring to backup mode

## Mechanical Specifications

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

## Environmental Specifications

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

\*Output power for FXM 650 and FXM 1100 is derated by 1.1% 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 (120 VAC), above 55°C (230 VAC)

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

## Agency Compliance

Electrical safety North America: UL1778, CSA 22.2 No 107.3

Electrical safety International: CE EN62040-1-2\*

Product Marks:



EMI Compliance: FCC/IC/CE Class A

CISPR 22 / EN 50022\*

EN 62040-2 (230VAC version only)

## Standard Features

- Automatic Voltage Regulation (AVR)
- Automatic frequency sensing (60Hz/50Hz)
- Standard RS-232 serial port (optional internal Ethernet SNMP)
- 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 (rack mount kit required)
- Generator-ready for extended runtime option
- Three user inputs: self test, alarm, shutdown
- User adjustable charger (off, 3A, 6A, 10A)
- 100 historical events logged with time/date stamping
- Fully programmable dry contacts

## Options

- Ethernet SNMP communication interface
- Rackmount kit

### Alpha FXM 1100 & 2000

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



Alpha FXM 650



For more information visit: [www.alpha.com](http://www.alpha.com)

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