![Alpha logo]

an EnerSys® company

FXM HP 2000
Rugged UPS Module

- 2000W/VA UPS designed to operate in extreme environments and provide maximum flexibility

- Advanced next-generation control and monitoring platform with high resolution color touchscreen LCD display with advanced local UI

- Built-in data loggers to monitor performance logs, user configurable alarms and advanced equation editing for custom data and actions

- Integrated USB host for local firmware upgrades, configuration updates, backup, restoration and cloning

- Wide range Automatic Voltage Regulation (AVR) lengthens battery life by providing protection without transferring to backup mode during voltage surge or sag

- Independently programmable control and reporting dry contacts allow monitoring and controlling of key functions
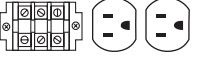
The FXM HP UPS continues the longstanding excellence in Battery Backup Systems by ensuring equipment in security, communications, traffic, industrial environments, and many other critical applications remains safe and protected from power disturbances and outages.

Thanks to its powerful programmable temperature compensated battery charger, the FXM UPS is capable of providing the runtime and extended battery life you need. The FXM HP colored LCD touchscreen display provides access to multiple configurable tabs for quick system status, overview and configuration without the need of a laptop

Multiple communication ports including two Ethernet connections permits simultaneous local craft access as well as permanent LAN/WAN connectivity. A USB key may also be used to quickly backup and restore site configuration settings and data logs. Enhanced security using modern encryption technology ensures proper authentication and privacy for remote connection with the UPS. Environmental conditions and other equipment can be monitored via a single IP interface via CAN port using Alpha® Analog Digital Input Output (ADIO) devices.

FXM HP 2000 Rugged UPS Module

Electrical

120VAC Model

Battery:	**String Voltage:** 48VDC **Battery Breaker Rating:** 80A **Maximum Charging Current:** 15A
Input:	**Nominal Voltage:** 120VAC **Voltage Range:** 85 to 150VAC **Frequency:** 50Hz or 60Hz (Autodetect Frequency is the default configuration, can also be manually configured.) ±5% **Current:** 20A (@ Nominal voltage and max battery charging current) **AC Breaker Rating:** 25A
Output:	**Waveform:** Pure sinewave **Nominal Voltage:** 120VAC **Voltage Regulation:** ±10% on line mode, ±2% on inverter mode **Power at 50°C:** 2000W/VA **Frequency:** Output frequency = Input frequency **Frequency Tolerance, Backup Mode:** ± 0.3 Hz

230VAC Model

Battery:	**String Voltage:** 48VDC **Battery Breaker Rating:** 80A **Maximum Charging Current:** 15A
Input:	**Nominal Voltage:** 210/220/230/240VAC **Voltage Range:** 153 to 322VAC **Frequency:** 50Hz or 60Hz (Autodetect Frequency is the default configuration, can also be manually configured.) ±5% **Current:** 12A (@ Nominal voltage and max battery charging current) **Input Breaker Rating:** 15A
Output:	**Waveform:** Pure sinewave **Nominal Voltage:** 210/220/230/240VAC (same as input) **Voltage Regulation:** ±10% on line mode, ±2% on inverter mode **Power at 55°C:** 2000W/VA **Frequency:** Output frequency = Input frequency **Frequency Tolerance:** Backup Mode: ± 0.3 Hz

Communication Interface

Protocol:	**SNMP:** SNMP v3 via Ethernet. Compatible with subscription and discovery services **TCP/IP:** IPv4 or IPv6 **Email:** SMTP via Ethernet
Security:	**Password:** 256-bit Encryption **Secured Web Interface:** SSL for HTTPS
Display:	Full graphic LCD, 480x272 pixels, Resistive touch screen
Ports:	• 2 x RJ45: Ethernet • 1 x RJ11: Battery Temperature Compensation • 1 x RJ12: for Alpha CAN devices • 1 x USB-A: For upgrades or file management via a standard USB flash drive • 1 x USB-Mini B: For soft shutdown using MegaTec protocol complaint client
Indicators:	• Solid Green: Line Mode, • Flashing Green: Inverter mode • Yellow/Amber: Minor alarms • Red: Major/Critical alarms
Dry Contacts:	Programmable NO/NC (250VAC, 1A)*, 3 user inputs, ATS

Factory Default:	• C1: On Battery
	• C2, C3: Low Battery + No Line
	• C4: Load Shed Timer 1
	• C5: Alarm
	• C6*: 48VDC @ 500mA
	• C7: User Inputs
	  • S1: Self test
	  • S2: User Input
	  • S3: Shutdown(EPO)
	• C8: ATS (48VDC @ 10mA)

* C6 is factory configurable only

Mechanical

Dimensions:	**mm:** 133H x 394W x 222D **inches:** 5.22H x 15.5W x 8.75D
Weight:	18kg/40lbs

Environmental

Operating Temp Range*:	-40 to 74°C (-40 to 165°F)	
Humidity:	Up to 95% (non condensing)	
Altitude (m/ft):	Up to 3700 (12,000)**	
Audible noise @ 25°C*:**	45dBa @ 1 meter (39in)	
MTBF (hours):	250K + as per Telcordia SR-332, 100% duty cycle, full load, @ 40°C	
BTU/Hr:	**Normal mode:**	**120VAC Model:** 57Watts/194.5BTU/HR **230VAC Model:** 48Watts/163.8BTU/HR
	Backup mode:	**120VAC Model:** 361.94Watts/1235BTU/HR **230VAC Model:** 347.3Watts/1185BTU/HR

*120VAC module derates after 50°C (122°F). 230VAC module derates after 55°C (131°F).
 Derates 1.4% per °C past listed temperature range until a maximum of 74°C.
**Derates 2°C per 300m (1000ft) above 1400m (4500ft)
*** Measured at 25°C ambient temperature

Performance

Typical Output Voltage THD (resistive load):	**120VAC Model:** <3% **230VAC Model:** <5%
Typical Efficiency* (resistive load):	**120VAC Model:** 97.5% **230VAC Model:** 97%
Typical Transfer Time:	<5ms
Load Crest Factor:	3:1 (load dependent)
Lightning/Surge Protection:	ANSI/IEEE C62.41.2:2002, Criteria A & B

*At nominal AC Input, full load and at 25°C ambient temperature

Power Connector Options

120VAC Model

	Input:		Output:	
Standard (0170022-001)		Terminal Block		Terminal Block
Optional (0170022-002)		Terminal Block		Terminal Block + Dual 5-15R

230VAC Model

	Input:		Output:	
Standard (0170022-101)		Terminal Block		Terminal Block

Agency Compliance

Electrical Safety:	UL 1778, CAN/CSA-C22.2 No. 107.3, EN 62040-1**
Marks:	CSA, CE **
EMC:	CFR Title 47 FCC Part 15 – Class A, ICES-003 – Class A, EN 62040-2 – UPS Category C2**
RoHS:	Yes

**Applies to 230VAC version only

For more information, please contact Australia Distributor:

Alpha Power Systems Pty Ltd
18/30 Heathcote Road
Moorebank NSW 2170
Australia

Phone: +61 2 96028331
Fax: +61 2 96029180
E-mail: admin@alphapower.com.au
Website: www.alphapower.com.au