an EnerSys® company

FXM 650

Rugged UPS Module

- 650W/VA UPS module designed to operate in extreme environments and provide maximum flexibility while ensuring critical loads remain protected and running during power outages and other power disturbances
- 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
- Temperature compensated battery charging protects batteries from overcharging or undercharging at extreme temperatures, extending the life of the battery
- Local and remote monitoring and control via RS232 port and Ethernet SNMP interface

Alpha® FXM is a line of rugged UPS power modules used worldwide where clean backup power is needed.

Designed to perform in the most extreme demanding environments, Alpha® FXM units ensure equipment in security, communications, traffic, industrial environments, and many other critical applications remains safe and protected from power disturbances. Thanks to its powerful programmable battery charger, the FXM is capable of providing the runtime you need. All FXM models are available in 120VAC and 230VAC.

Alpha® FXM family of uninterruptible power supplies (UPS) are designed to provide clean and reliable backup power. Featuring an automatic voltage regulation (AVR), each FXM UPS provides power stability in varied power conditions without using batteries as well as the ability to switch to emergency backup power while maintaining critical loads. The factory installed SNMP card allows remote programming, monitoring and automatic e-mail notification via a web browser.

FXM 650 Rugged UPS Module

Consult your sales representative for P/N configurations

Electrical

120VAC Model

Battery String Voltage:	24VDC or 48VDC
Nominal Voltage:	120VAC
Frequency:	60Hz/50Hz ±5% (auto detection)
Input:	**Current:** 8.7A (@ nominal voltage and max battery charging current) **Voltage Range:** 85 to 175VAC
Output:	**Waveform:** Pure sinewave **Nominal voltage:** 120VAC **Voltage regulation:** ±10% on line mode, ±2% on inverter mode **Power at 55°C:** 650W/VA **Charge current:** 10A Max **Frequency:** Output frequency = Input frequency

230VAC Model

Battery String Voltage:	24VDC
Nominal Voltage:	230VAC
Frequency:	60Hz/50Hz±5% (auto detection)
Input:	**Current:** 4.5A (@ nominal voltage and max battery charging current) **Voltage range:** 150 to 328VAC
Output:	**Waveform:** Pure sinewave **Nominal voltage:** 230VAC **Voltage regulation:** ±10% on line mode, ±2% on inverter mode **Power at 55°C:** 650W/VA **Frequency:** Output frequency = Input frequency

Mechanical

Dimensions:	**mm:** 88H x 432W x 229D **inches:** 3.47H x 17W x 9D
Weight:	11kg (25lbs)

Communication Interface

Display:	2 x 20 backlit alpha-numeric LCD
Ports:	• DE-9 Female: Local RS232 Communication • RJ45: Remote Communication • RJ11: Battery Temperature Compensation
Indicators:	• Green & Red LED's • Solid Green: Line Mode • Flashing Green: Inverter Mode • Flashing Red: Alarm • Solid Red: Fault
Dry Contacts:	Programmable NO/NC (250VAC, 1A)*, 3 user inputs, ATS

Factory Default:	• C1: On Battery
	• C2, C3: Low Battery
	• C4: Load Shed Timer 1
	• C5: Alarm
	• C6*: 48VDC @ 500mA
	• C7: User Inputs
	  • S1: Self test
	  • S2: User Input
	  • S3: Shutdown(EPO)
	• C8: ATS

* C6 is factory configurable only, voltage based on DC bus voltage

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):	150K + as per Telcordia SR-332, 100% duty cycle, full load
BTU/Hr:	**Normal mode:** 9W/30.71 BTU/hr **Backup mode:** FXM 650-48: 143W/488 BTU/hr **Backup mode:** FXM 650-24: 217W/740 BTU/hr

*Derates after 55°C
**Derates 2°C per 300m (1000ft) above 1400m (4500ft)

Performance

Typical Output Voltage THD:	<3% (resistive load)
Typical Efficiency:	>98% (resistive load)
Typical Transfer Time:	<5ms
Load Crest Factor:	3:1 (load dependent)

Power Connector Options

120VAC Model

Input:			**Output:**		
Standard		Terminal Block	**Standard**		Terminal Block

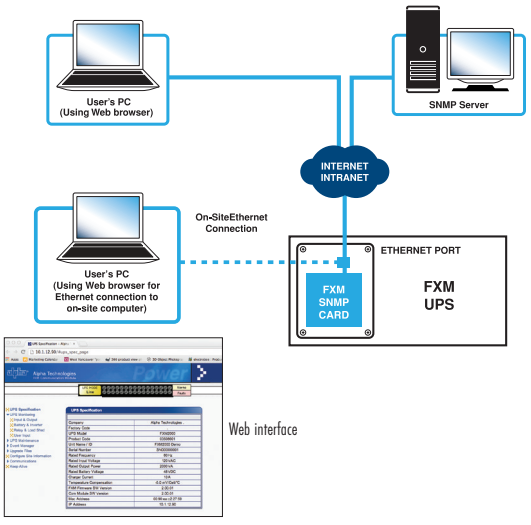
230VAC Model

Standard		Terminal Block	**Standard**		Terminal Block

Agency Compliance

Electrical Safety:	UL1778, CSA 22.2 No 107.3, EN62040-1
Marks:	C SP US, CE**
EMI:	CFR47, Part 15 Subpart B, Class A; CES-003 Class A; EN62040-2 Class A

**CE applies to 230VAC version only



an EnerSys® company

Alpha Technologies Services, Inc. USA: 3767 Alpha Way, Bellingham, WA 98226 Canada: 7700 Riverfront Gate, Burnaby, BC V5J 5M4
Toll Free North America: +1 800 322 5742 Outside US: +1 360 647 2360 Technical Support: +1 800 863 3364
For more information visit **www.alpha.com**