

Power

AlphaNet™ DSM and ESM

DOCSIS® and Ethernet Status Monitor



XP-DSM
with embedded
DOCSIS modem



XP-ESM
with Ethernet

- Network enables the Alpha XM2, XM2VP, GMX and VMX Broadband UPS power supplies, no additional power supply interface cards required.
- Supports standard networking protocols including SNMPv1 and v2c
- Embedded WEB server for direct unit diagnostics
- Embedded DOCSIS or EuroDOCSIS cable modem or direct Ethernet interface to user-supplied modem
- Directly monitor up to two 36V or 48V battery strings
- Standard ANSI/SCTE MIBs
- Craft port provides local technician access

Alpha's AlphaNet family of networking products including the DOCSIS and Ethernet Status Module (DSM and ESM) broadband power communication card enables Alpha's XM2 UPS to connect directly to a network with standard Ethernet, a user supplied cable modem or an embedded cable modem. Advanced features and networking services enable quick reporting and access to critical powering information to keep your broadband network running.

The AlphaNet family of products supports all standard networking protocols and standards required for effective power network management. Through a Simple Network Management Protocol (SNMP) interface, standard MIBs are used for quick, efficient network status and diagnostics. A WEB interface enables any authorized personnel direct access to powerful, advanced diagnostics using a common web browser. No proprietary software required. A single DSM/ESM installed in an XM2 supports communications and system control for multiple XM2 power supplies.



AlphaNet ESM and DSM

Network Interface Card Specifications

Interface

Power Supplies Supported:	XM2, XM2VP, GMX, VMX
Network Connection:	RJ-45, MDI standard 10 BASE-T auto-sensing (ESM models only)
RF Connection:	F-connector, female, 75ohm (DSM models only)
LED Indicators:	Alarm, Ready, Comm, Link, DS, REG
Tamper:	2 pin header
Battery Input A/B:	8 pin, female connector, string A and B, 36V or 48V voltage monitoring
Battery Input C/D:	8 pin, female connector, string C and D, 36V or 48V voltage monitoring (optional)
Mult-Device Communications:	RJ-12 offset, RS-485 multidrop, Communication and system control for multiple XM2 Power Supplies
Craft Port:	RJ-12, RS-232, 19.2,N,8,1 Requires serial port adaptor for laptop connection Access to power supply MIB data and network parameters

Electrical/Mechanical/Environmental

Storage Temperature:	-40°C to 65°C / -40°F to 149°F
Humidity:	-40°C to 85°C / -40°F to 185°F
Emmissions:	10 to 90% non-condensing
Warranty:	EN50022 Class A ¹ FCC Part 15 Class A ¹ 2 years

Network Communications

Network Protocols:	IP, UDP, TCP, DHCP, TFTP
SNMP:	v1, v2c
Embedded Web Interface:	Read access MIB variables, Read-Write access networking parameters
MIBs:	Power Supply (ANSI/SCTE 38-4) Property (ANSI/SCTE 38-1) Alpha Proprietary Advanced UPS Diagnostics

Power Supply Monitored Parameters

Major Alarm:	Logical (OR) of: test fail, battery fail, line isolation alarm, output overload, inverter over temperature, N+1 active, fuse fail
Minor Alarm:	Logical (OR) of: temperature probe error, AC line loss, N+1 error
Input Line Voltage:	90-270Vac 50/60Hz measured value
Output Voltage:	60/90Vac measured value
Output Current 1:	0 to 25A measured value
Output Current 2,3,4:	0 to 25A measured value (if optional ports installed)
Output Power:	Calculated, reported in AC Watts
UPS Status:	AC line, Standby, Test in-process, Test Alarm
Enclosure Door:	Open/Closed
Battery Voltage:	6V or 12V batteries, up to 16 batteries Individual battery voltages measured reported to ±100mv resolution
Battery Temperature:	Measured, reported in Celcius
Remote Test Control:	Start/Stop XM2 self test cycle

Embedded Cable Modem (DSM Models Only)

Standards:	DOCSIS 2.0 EuroDOCSIS 2.0
Tx Frequency Range:	5 to 42MHz DOCSIS 5 to 65MHz EuroDOCSIS
Output Power:	8 to 58dBmV
Channel Bandwidth:	6MHz DOCSIS 8MHz EuroDOCSIS
Receive Center Frequency Range:	91 to 857MHz DOCSIS 108 to 862MHz EuroDOCSIS
Input Level:	-15 to 15dBmV

Ordering Information

Model Number	Description	Model Number	Description
XP-DSM	DSM for XM2 Series Power Supplies	VMX-DSM	DSM for VMX Series Power Supplies
XP-DSM-VP	DSM for XM2 VP Series Power Supplies	VMX-DSM-ED	EuroDOCSIS DSM for VMX Series Power Supplies
XP-DSM-ED	EuroDOCSIS DSM for XM2 Series Power Supplies	VMX-ESM	ESM for VMX Series Power Supplies
XP-DSM-ED-VP	EuroDOCSIS DSM for XM2 VP Series Power Supplies	DSM-CRAFT	DSM and ESM to Laptop Serial Interface Cable
XP-ESM	ESM for XM2 Series Power Supplies	XP-BSC-3-6	Wire Kit, Battery Sense, 1x36V, 6'
XP-ESM-VP	ESM for XM2 VP Series Power Supplies	XP-BSC-6-6	Wire Kit, Battery Sense, 2x36V, 6'
GMX-DSM	DSM for GMX Series Power Supplies	XP-BSC-4-6	Wire Kit, Battery Sense, 1x48V, 6'
GMX-DSM-ED	EuroDOCSIS DSM for GMX Series Power Supplies		
GMX-ESM	ESM for GMX Series Power Supplies		* Other Battery Sense Wire Kits available, call Alpha for more information

For contact information visit www.alpha.com

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