

# Power

## AlphaNet™ EDH2

External Tollgrade DOCSIS® Transponder



- Uses existing headend equipment
- Compatible with ANSI/SCTE HMS standards
- Supports multiple power supply models, multiple battery strings and a generator
- Optional VoIP testing features

Alpha's External DOCSIS Transponder provides the ability for cable operators to manage network powering through the existing cable modem infrastructure. The power supply, multiple batteries and a generator can be monitored using a single transponder. Power supply status is transmitted to a management system over the network's DOCSIS cable modem channels through the existing CMTS. Bandwidth utilization is minimized by using standard SNMP (Simple Network Management Protocol) communications. Status monitoring information is compatible with ANSI/SCTE HMS standards.

Whether you are extending the life of your network backup power through battery balancing, managing QoS for VoIP services or monitoring for trouble areas during an AC power outage, the Alpha DOCSIS Network Power Monitor provides the tools to manage today's network power requirements with the ability to upgrade for tomorrow's needs.



# AlphaNet EDH2

## General Specifications

### General

Power Supplies Supported: XM2 (requires USM2 or USM2.5)  
 XM (requires USM)  
 Lectro ZTT, ZTT+, CPR

DOCSIS Compatibility: DOCSIS 2.0

Monitoring Protocol: SNMPv1

Devices Monitored: Power Supply, Batteries and Generator  
 (analog status approximates  
 ANSI/SCTE 25-3 2002, formerly HMS 022)

### RF Transmit/Receive

Tx Frequency Range: 5 to 42MHz

Output Power: 8 to 58dBmV

Channel Bandwidth: 6MHz

Receive Center Freq Range: 91 to 857MHz  
 (Standard, HRC, IRC channels)

Input Level: -15 to 15dBmV

### Monitored Parameters

#### Power Supply Data

Model:	XM2	XM	AM	ZTT Series	CPR
Major Alarm:	X	X	X	X	X
Minor Alarm:	X	X	X	X	X
Input Line Voltage Present:		X <sup>1</sup>	X	X	X <sup>1</sup>
X					
Output Voltage:	X	X	X	X <sup>1</sup>	X
Battery Voltage:	X	X	X	X	X
Output Current:	X	X	X	X <sup>1</sup>	X
Standby/AC Line Fail:	X	X	X	X	X
Equipment/Test Fail:	X	X	X		
Enclosure Door Status:	X	X	X	X	X
Remote Test Control:	X	X	X	X	X

#### Notes:

Number of Battery String: One to Four of 36V or 48V

Battery Data: Individual Battery Voltages  
 Battery Compartment Temperature  
 Major Alarm (Consists of: Low Oil  
 Pressure, Engine Over-temp, Engine  
 Over-speed, Crank Limit, Over Voltage,  
 Low Fuel, Water Intrusion, Pad Shear,  
 Gas Hazard, Test Fail)

Minor Alarm (Consists of: Control Fail,  
 Alternator Fail, Low Ignition Battery  
 Voltage, Manual Bypass Active,  
 Enclosure Door, DC Voltage Tolerance,  
 Engine Disabled, Service Required)

Engine Alarm (Consists of: Low Oil  
 Pressure, Engine Over-temp, Engine  
 Over-speed, Crank Limit, Engine Dis-  
 abled)

Gas Hazard  
 Enclosure Alarm  
 Test Status  
 Enclosure Door  
 Remote Test Control

### Hardware

RF Cable Interface: F-connector, female, 75Ohm

Local Interface: RJ-12, RS-232, 19.2kb,N,8,1  
 Requires serial port adapter and PC with  
 terminal emulation software  
 (Hyper-Terminal recommended)

LED Indicators: RF Transmit  
 RF Receive/Link  
 Transponder Ready  
 Local Data

Environmental: -40 to 65°C  
 10 to 90% non-condensing humidity

Emissions: EN55022 Class A and FCC Part 15 Class A  
 (Installed in power supply enclosure system)

Warranty: 2 years

Dimensions (in/mm): 4.6D x 5.75W x 1.5H/116.8D x 146.1W x 38.1H

### Management

NMS/EMS: • Cheetah™ DOCSIS® Management Software  
 • Standard SNMP Management Tools

HMS MIBs: Power Supply (ANSI/SCTE 38-4)  
 Generator (ANSI/SCTE 38-6)  
 Transponder (ANSI/SCTE 38-3)  
 Alarm/Trap (ANSI/SCTE 38-1 and 38-2)

### Ordering Information

XP-EDH2: External DOCSIS Transponder for XM2,  
 XM, AM, Lectro ZTT compatible with VoIP  
 Test Function (745-419-20)  
 Order power supply interface cables and  
 battery sense kit separately.

CPR-EDH: External DOCSIS Transponder for  
 Lectro CPR  
 Power supply interface cable included.  
 Order battery sense kit separately.

XMZ-ICK: Interface cable for monitoring XM2 with  
 USM2 or USM2.5 status interface (875-335-20)

XM/AM-ICK: Interface cable for monitoring XM with USM  
 and AM with RPM status interface (875-335-21)  
 RPM factory configured for AM Communications

ZTT-ICK: Interface cable for monitoring ZTT or ZTT+ (875-335-22)

ZTT-ICKZ: Interface cable for monitoring ZTT+ (875-335-23)  
 (pre 1998 versions)

DCO-ADPTR: Local port adaptor (875-349-10)

### Battery Sense Wire Kits

XP-BSC-24-2-6:	1x24V, 6ft	875-401-20
XP-BSC-24-2-6:	2x24V, 6ft	875-401-21
XP-BSC-24-2-9:	1x24V, 9ft	875-401-22
XP-BSC-24-4-9:	2x24V, 9ft	875-401-23
XP-BSC-3-6:	1x36V, 6ft	874-842-21
XP-BSC-3-9:	1x36V, 9ft	874-842-27
XP-BSC-6-9:	2x36V, 9ft	874-842-28
XP-BSC-4-6:	1x48V, 6ft	874-841-21
XP-BSC-8-6:	2x48V, 6ft	874-841-20
XP-BSC-4-9:	1x48V, 9ft	874-841-24
XP-BSC-8-9:	2x48V, 9ft	874-841-25

Extended wire lengths available. Contact Alpha for ordering information.

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

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