

DOCSIS 3.0 - HMS

Status Monitoring for HFC Power Supplies

Transponder



Description

The DHT3 model series is the next generation of DOCSIS-HMS transponders and is the first DOCSIS 3.0 Transponder. Electroline takes advantage of the advanced functionality built into the DOCSIS SoCs to provide added value no others can provide. A Spectrum Analyzer is built in to each transponder and therefore each power supply location becomes an “always on” test point for not only power supplies but also for the downstream broadband HFC network. For the price of a transponder you also get a Spectrum Analyzer. All models have an integrated web server that provide up to the minute display of all power supply metrics and states.

The Electroline Advantage

As pioneers in power supply status monitoring using HMS and DOCSIS® technology, Electroline knows the importance of what is inside its transponder and accessories. Electroline uses field-proven DOCSIS® and EuroDOCSIS integrated circuits and builds each unit with components rated for extreme temperatures, thus setting the industry standard for quality and performance. Forward-looking and innovative, Electroline is also leading the way in enhanced network monitoring that harnesses the power of DOCSIS®-based field units.

Features

- More than just a transponder – It’s a **Spectrum Analyzer**
- DOCSIS 3.0 embedded modem
- Temperature Hardened
- Standby Power Metrics and Alarming
- Integrated Web server
- Embedded or External Applications
- For all popular brands of power supplies
- SCTE - HMS compliant

DOCSIS® 3.0 – HMS STATUS MONITORING TRANSPONDER for HFC POWER SUPPLIES

POWER SUPPLY MONITORING / CONTROL		note
Monitored Power supplies	Most major brands and models including Alpha, Myers, Multilink, Belden	3
Battery Monitoring	Up to 4 strings or either 3 or 4 batteries per string	
	Voltage of each battery	
	String Voltage	
	String Current	
	Temperature	
State Monitoring	Standby Status	
	Standby Event History	
	Tamper / cabinet door	
	Alarm State	
Power Supply Metrics	Output Voltage	
	Output Current	
	Output Power	
	Input Voltage	
Standby Control	Start / Stop Standby Test	

EMBEDDED CABLE MODEM			note
	DOCSIS®	EuroDOCSIS®	
Specification Compliance	DOCSIS 3.0	EuroDOCSIS 3.0	
Upstream Mode	QPSK, QAM, SCDMA	QPSK, QAM, SCDMA	
Max operating Level (1 channel)	QPSK: 61 dBmV 8/16 QAM: 58 dBmV 32/64 QAM: 57 dBmV	QPSK: 121 dBuV 8/16 QAM: 118 dBuV 32/64 QAM: 117 dBuV	
Receiver Range	-15 to +15 dBmV	64 QAM 43 to +73 dBuV 256 QAM 47 to +77 dBuV	
Downstream Channel bandwidth	6 MHz	8 MHz	

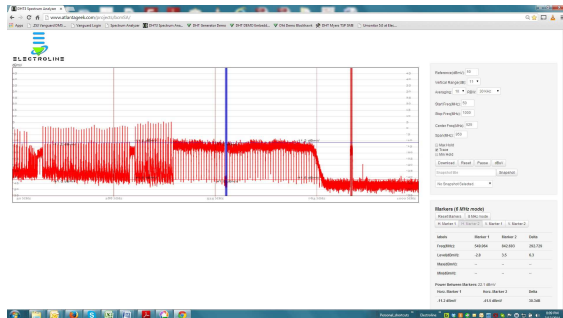
INTERFACE and I/O		note
ETHERNET	1Gbps, RJ45, Craft Mode or CPE mode, Provisionable	
Visual LED State Indicators	4 LEDs for modem state, 2 LED Ethernet status, 1 LED(bicolor) for RF Status	
Battery Connectors	Connects wiring harness to battery strings to derive power and monitor voltages	
HMS standard extension port	RJ-45 – Connect Generators and Battery testing devices for Remote control and monitoring	
RF port	Female “F”	
Expansion Port	Use for added value and specialized applications	
Heater Control	Interface for Battery heaters	
Battery Tester	Charge manager and Conductance testing option available	
Generator Interface	Via HMS port. Monitors: On/off status, alarm state, gas hazard, battery voltage, fuel state, remote test control	
WEB-UI	Power supply metrics, Cable modem metrics, network metrics, standby event log, trouble shooting event logs, generator metrics	

PROTOCOLS / STANDARDS / COMPLIANCE		note
DOCSIS	IP / TCP / UDP / ARP / ICMP / DHCP / TP / TFTP / SNMP / HTTP	
Firmware Remote Upgrade	Single image same a DOCSIS Modem	
SNMP	SNMPv1, SNMPv2c, SNMP v3	
MIBS	Electroline Added Value, Private, ANSI/ SCTE-38-4, DOCSIS 3.0	
Power Supply interface	ANSI/SCTE 25-3 2005	
Regulatory	FCC part 15 Class A; IEEE C62.41:1991 B3; ROHS directive2002/95/EC	

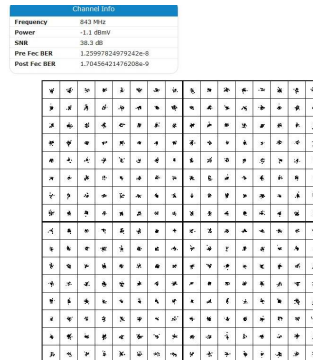
Notes:

- 1) Specifications are subject to change without notice, 2) Contact your Electroline Sales representative for ordering information specific to your make and model of power supply, 3) Some features are power supply dependant, 4) DOCSIS® is a registered trademark of Cable Television Laboratories.

ENVIRONMENTAL		note
Operating Temperature	-40 to +158°F; -40 to +70°C	
Humidity	10 to 90% non-condensing	



WEB-UI Spectrum Analyzer



WEB-UI QAM Channel Constellation

For more information on our products, please visit: www.electroline.com or call: 800-461-3344

