

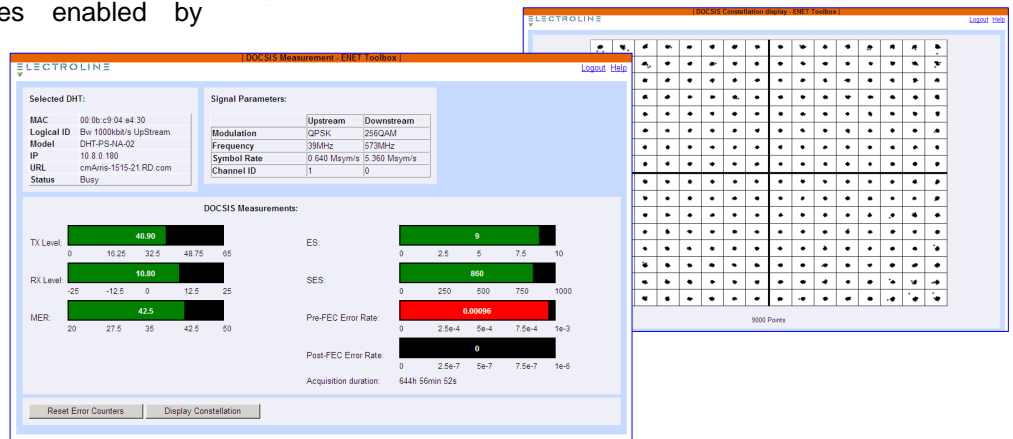


ENetToolBox™

Enhanced Network Monitoring from Electroline

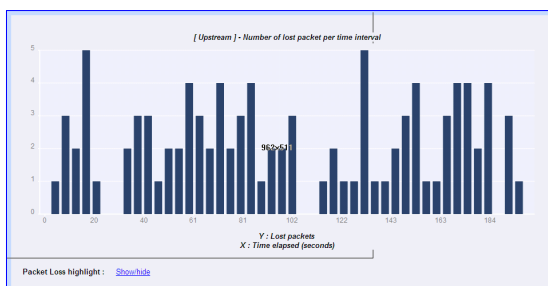
Description

The ENetToolBox™ is a powerful Web server and test stream generator. This back-office software and hardware platform drives the ENetMonitor™ features enabled by firmware in Electroline's family of DOCSIS®-based modems and transponders. With the ENetToolBox™ and the ENetMonitor™ system, you now have intelligent, user-customizable tools for testing a host of parameters to help you stay on top of the quality of your VoIP, Internet and other two-way service deployments.



Applications

Making use of RF and DOCSIS® channels and a CMTS, the Electroline ENetToolBox™ server and Web application drives the ENetMonitor™ capabilities loaded into Electroline's DOCSIS®-based transponders and modems. You can monitor and alarm on critical performance criteria for Internet and VoIP such as MER, packet loss, jitter and latency based on user-defined monitoring thresholds. In addition to a host of DOCSIS® tests and VoIP-related tests, ENetToolBox™ offers quick access to power supply monitoring parameters in each Electroline transponder to check current values.



The Electroline Advantage

As pioneers in power supply status monitoring using HMS and DOCSIS® technology, Electroline has helped fulfill the promise of intelligent network monitoring by harnessing the DOCSIS® platform. Our innovative approach to enhancing the value of transponders puts cutting-edge status monitoring within reach of any operator, for any network.

Features

- Drives the downloadable ENetMonitor™ firmware in an Electroline's DOCSIS® - based monitoring products
- VoIP Service Monitor: jitter, packet loss (up and downstream), latency, mean opinion score (MOS)
- Network Performance Monitor: QAM constellation display, MER, transmit and receive levels, throughput
- Access to current power supply status readings via the DHT
- Compatible with Transponders (DHT), Line Monitors (DLM), and Hardened Modems (DRM)



ENetToolBox™ for Enhanced Network Monitoring with Electroline DHT Transponders, DRM Modems and DLM Line Monitors

Test	Description	01 version	All Other Versions
QAM Constellation	The Transponder accumulates data and transmits it to a monitor station for display of the downstream QAM constellation for the DOCSIS® operating Channel.	✓	✓
Downstream QAM Channel MER	Tests MER for the DOCSIS® operating channel	✓	✓
SpeedProbe™ • Upstream • Downstream	Test the ability of the network to provide the throughput.	NO	✓
PacketTrac™ • Upstream • Downstream	Identify where packet loss is occurring. This feature determines if the packets are dropped by poor downstream network performance or poor upstream network performance.	✓	✓
Packet Error Rate	The transponder will track of packet error rate, via a loop back test stream that is generated in the headend and repeated in the return network	✓	✓
Alarms	An alarm function can be set up to send an SNMP trap to a designated management station(s). Can be set up to monitor DOCSIS® or HMS MIB objects.	✓	✓
Jitter, Packet Loss, Latency	Monitor during test cycle	✓	✓
VoIP Service MOS	Monitor and calculate the Mean Opinion Score (MOS) and generate an alarm when below a provisioned threshold.	✓	✓
Notes: 1. Contact the Customer Service department, the Technical Support department group or your sales representative to obtain up to date specifications appropriate for system designs. Specifications contained in this Fact Sheet are general in nature and it is recommended to use the detailed information contained on the Product Specification documents for system design purposes. 2. Information contained herein may be changed without notice.			

An Ongoing Commitment to Enhancing Network Monitoring

ENetToolBox™ is part of Electroline's ENetMonitor™ P1 enhanced network monitoring system, now in its first phase (P1 for Phase 1). We are committed to a product road map that aims to expand DOCSIS®-based status monitoring even further. Look for added functionality with ENetMonitor™ P2 (Phase 2). Contact your Electroline representative for details and availability.

Corporate Headquarters
Electroline Equipment Inc.
 8265 St-Michel Boulevard
 Montréal, Québec Canada H1Z 3E4

Telephone
North America (800) 461-3344
Elsewhere (514) 374-6335

Fax
Corporate (514) 374-9370
Ordering (514) 374-2257

General Inquiries
 info@electroline.com
Technical Support
 support@electroline.com

www.electroline.com