MTTplus-523
G.fast/DSL Test Module

for MTTplus
Modular Test Platform

The MTTplus-523 Module addresses key test requirements for IP based broadband services deployed over a G.fast or DSL Access network.

Platform and Module Highlights

- Modern, modular test platform with a growing range of available test modules covering legacy and modern Access (copper and fiber), FTTx, Metro, Carrier Ethernet and Transport technologies
- Test set connectivity via USB, Ethernet, WiFi, and Cellular
- Fast and efficient test results transfer to USB memory stick
- Built-in GPS option
- Built-in camera option for job site, QR, and bar code documentation
- Small package and light weight
- Field replaceable battery pack
- Large LCD touch screen and ambient light sensor
- Fiber Optic Tools USB accessories support: Digital Fiber Inspection Scope and Optical Power Meter
- WiFi Wiz with InSSIDer SSID Analysis

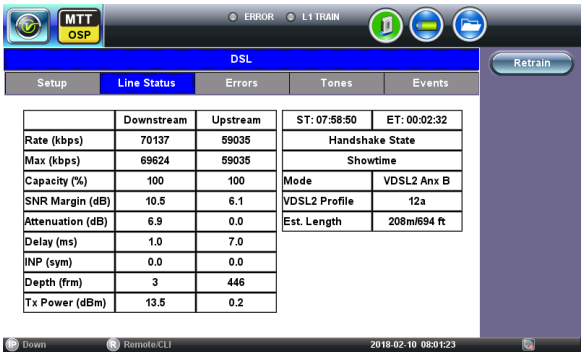
Key Features

- XTU-R and FTU-R CPE Emulation
- G.fast, full frequency band up to 106 MHz
- VDSL2, up to Profile 35b and ADSLx technologies
- Key DSL/G.fast metrics including Data Rate, SNR Margin, and line errors
- Latest DSL innovations including Vectoring and Retransmission
- IP Services Testing

G.fast/DSL

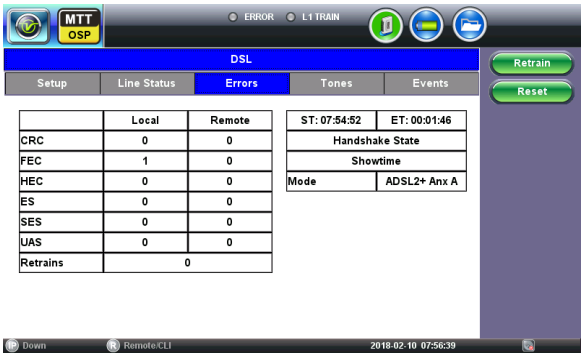
Line Status

Supports key G.fast/DSL modem metrics including Data Rate, and SNR Margin.



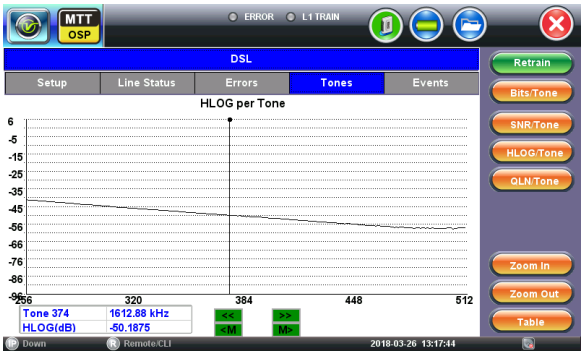
Error Measurements

Continuous monitoring for CRC Errors and errored events for both the local and far end XTU.

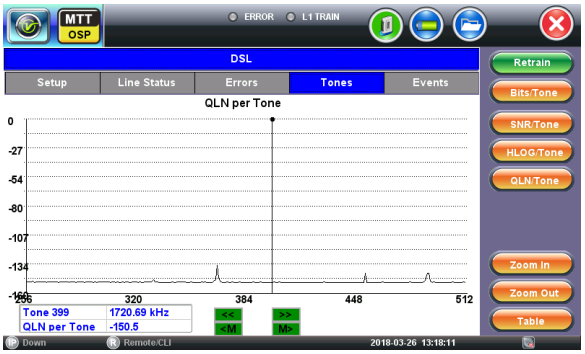


HLOG and QLN Measurements

HLOG provides an attenuation vs carrier bin frequency graph. It is an insertion loss curve that can depict the presence of Bridge Taps, with its characteristic magnitude dip.

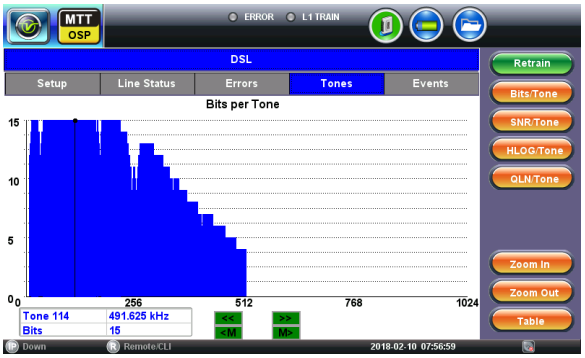


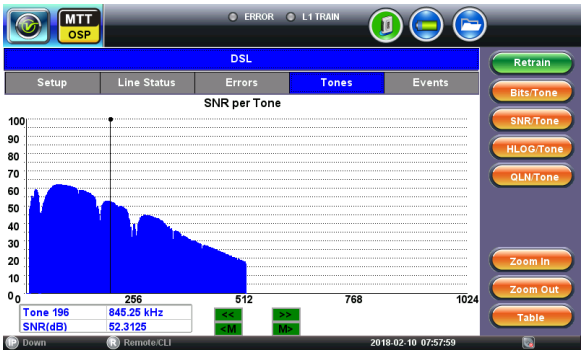
QLN provides a quiet line noise vs carrier bin spectrum graph, which can help detect the presence of RF interference on the copper pair under test.



Bits per Tone and SNR per Tone

Bits loading and raw SNR per tone provide insightful characteristics of the line – how good is a particular carrier and the presence of line impacting external disturbers.





Events

Events mode not only logs and displays a time stamped sequence of the DSL modem to DSLAM connection process, but also records modem retrains and errors. At a mere glance, the technician can quickly identify whether the modem is training successfully and whether or not Showtime was achieved in a timely manner.

VDSL2 Vectoring

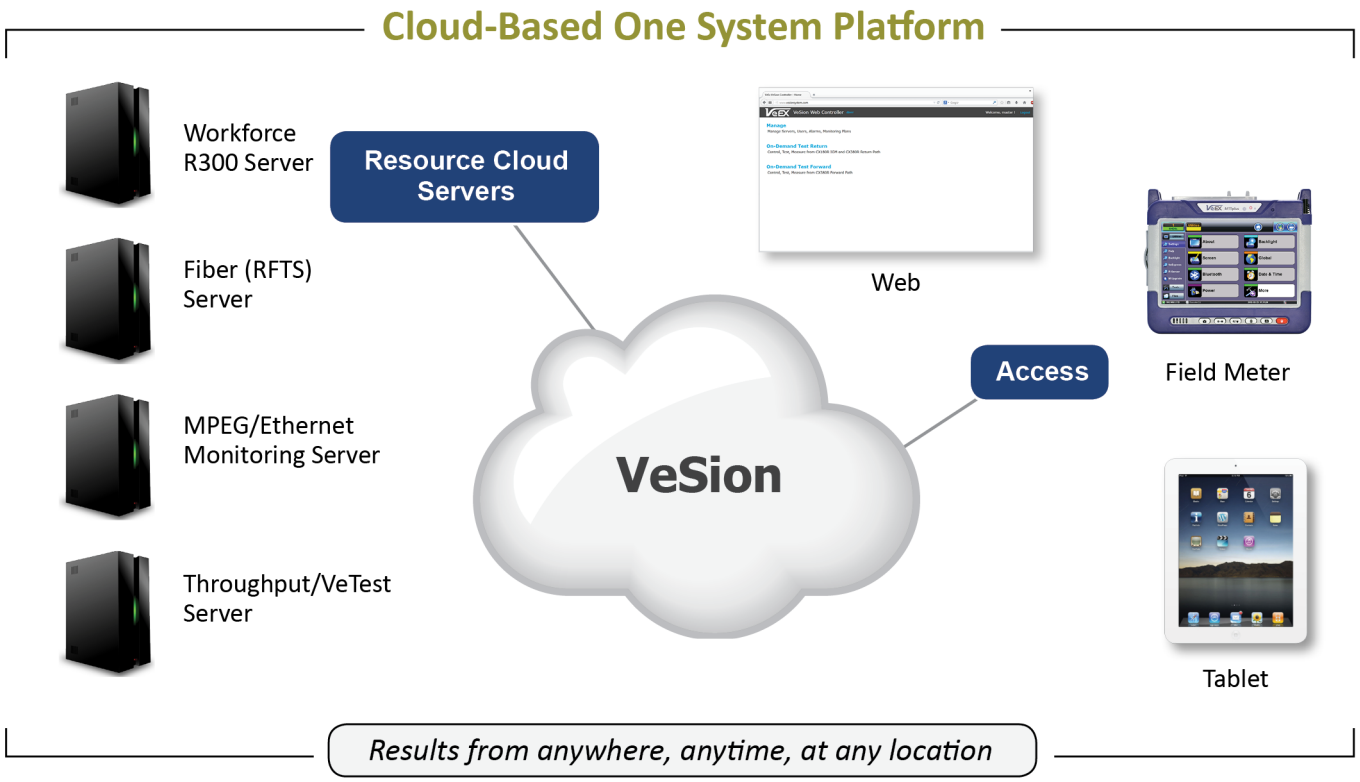
Vectoring is a noise cancelling method that reduces self crosstalk for multiple VDSL2 pairs, enabling greater data rates. The G.fast/DSL module supports Vectoring and is compliant to the G.993.5 G.vector standard.

Impulse Noise Protection and Retransmission

There are two primary methods to mitigate the impact of unpredictable impulse noise bursts that are present on many copper plants. These methods are traditional FEC (Forward Error Correction) with Interleaving and the latest innovation: G.998.4 (G.inp) physical layer retransmission. Both impulse noise protection methods are supported by the G.fast/DSL module.

VeSion R300 Productivity Server

Centralized asset and test result management is a standard feature for the MTTplus platform with seamless transactions with the VeSion R300 Productivity Server.



Specifications

DSL/G.fast Standards

G.fast, ITU-T G.9700 / 9701, 106 MHz Band
VDSL2, ITU-T G.993.2 supporting, Profiles 8a/8b/8c/8d, 12a/12b, 17a, 30a, 35b
ADSLx, ITU-T G.992.5, G.992.3, G.992.1, supporting Annex A, L, M
G.993.5 G.Vector
G.998.4 G.INP Retransmission

Measurements

Actual Data Rate
Max Attainable Rate
SNR Margin
Capacity
Attenuation
INP
Interleaved Delay and Depth
Transmit (Output) Power
CRC, FEC, HEC counters
Errored Seconds
Number of Retrains
Carrier Tones in Graphical and Tabular Format for Bits, SNR, HLOG, QLN
Event Tracer

Test Ports

RJ11 for DSL/G.fast
RJ45 for Ethernet Pass Through Mode

VeEX Inc.
2827 Lakeview Court
Fremont, CA 94538 USA
Tel: +1.510.651.0500
Fax: +1.510.651.0505
www.veexinc.com
customercare@veexinc.com

D05-00-149P A00 2018/11