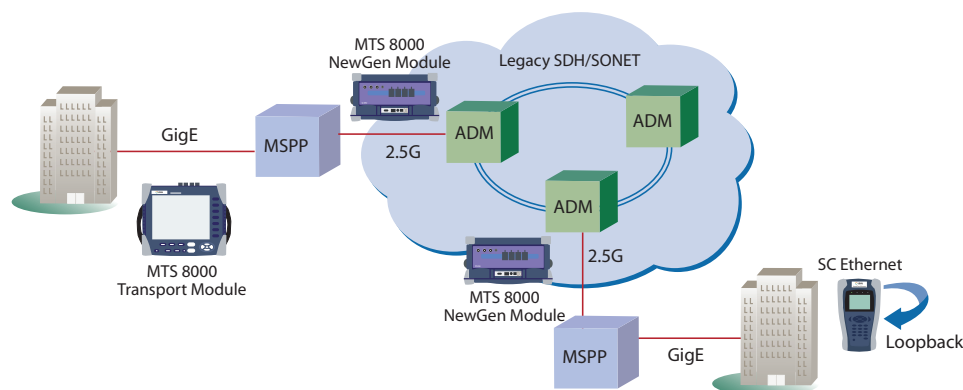




# Introducing the JDSU MTS 8000

## NewGen Module

Ethernet-over-SONET/SDH (EoS), also referred to as new or next generation SONET/SDH ("NewGen") enables operators to cost-effectively deliver Ethernet-based services to business and residential users with maximum reuse of existing infrastructure. The NewGen SONET/SDH Module enhances the JDSU MTS 8000 platform with the ability to test Ethernet transported over SONET/SDH networks using VCAT (Virtual Concatenation) and GFP (Generic Framing Procedure). This all-in-one module provides testing capabilities ranging from the SONET/SDH layer down to the analysis of the payload of the transported frames at the Ethernet layer, enabling service providers to efficiently turn-up and troubleshoot Ethernet services throughout the network. In addition, the dynamic increase and/or decrease of bandwidth using link capacity adjustment scheme (LCAS) can be used to test reliable on-demand bandwidth increases or decreases in the EoS network.



### Features

- 155M, 622M, 2.5G optical SONET/SDH Interfaces
- Higher Order and Lower Order VCAT (virtual concatenation) structures with up to 1G of Ethernet traffic analysis capability
- GFP-F generation and analysis
- Virtual Concatenation group search utility allows a user to scan the selected physical signal structure to find a dedicated virtual concatenated group for lower order traffic identification
- LCAS generation and analysis, including a protocol tracer for sink and source state machines
- Differential delay analysis for all VCG members
- MAC, VLAN and QinQ generation Ethernet testing
- Support the transmission and analysis of Ethernet connectivity, throughput and QoS testing

### Applications

#### Turning up and Troubleshooting Ethernet over SONET/SDH (EoS) circuits

##### Ensure Connectivity

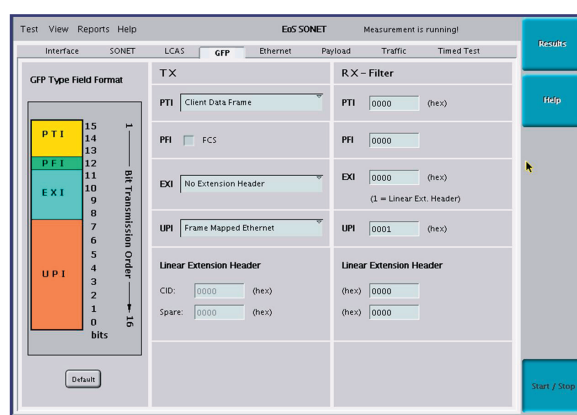
- Verify system provisioning by easily identifying Virtually Concatenated groups and members
- Verify the mapping of Ethernet frames into SONET/SDH payloads by checking the GFP layer for errors and alarms
- Transmit Ethernet traffic using the MAC address and VLAN Tag, including stacked VLAN (QinQ) capabilities
- Trace LCAS protocols for the correct setup and teardown of VCAT groups

##### Verify Throughput

- Ensure throughput by verifying the aggregate EoS bandwidth transported through multiple virtual containers
- Use the Ethernet filter to identify traffic per source and destination MAC address

##### Measure QoS

- Ensure QoS by measuring the differential delay of EoS circuits transversing different paths through the network
- Monitor for errors and alarms in Virtually Concatenated Groups and Members
- Detect lost Ethernet frames, measure delay and perform BER testing while interoperating with the Transport module



In using the NewGen module, operators will benefit from JDSU's proven technology and testing expertise that has helped many of the world leading equipment manufacturers design and verify their NewGen systems with the ONT platform. JDSU has been able to apply this experience to field applications while leveraging the market leading MTS 8000 platform with a common user interface. This powerful combination enables operators to have one platform in support of current and future testing needs.

### The Power of One— Performing the Work of Many

Combining multiple test capabilities with unprecedented levels of field modularity and integration, the JDSU MTS 8000 allows integration of one or all of the following modules for provisioning and maintaining short-haul, long-haul, FTTx, Metro, CWDM, and DWDM networks:

#### Transport module

The only solution available to market that combines T1/E1-10G SONET/SDH, 10/100/Gig Ethernet, 10Gig Ethernet LAN/WAN PHY, IP, Fibre Channel and OTN technologies in one convenient package.

#### Optical Time Domain Reflectometer (OTDR)

With over 17 different plug-in modules covering all configurations from short-haul to ultra-long haul networks

#### Chromatic Dispersion (CD)

Based on a single ended method requiring only one technician to perform the test

#### Polarization Mode Dispersion (PMD)

For qualifying the fiber plant before installing high-speed transmission technologies and avoiding costly service disruptions and/or rework

#### Wavelength Division Multiplexing (WDM)

For channel testing and measuring spectral attenuation in the C and L bands

#### Optical Spectrum Analyzer (OSA)

For high-performance, full-spectrum DWDM analysis with a unique option for 10.7G channel isolation