

## STT 40G Transport Module

The STT 40G module is the most portable 40G SDH/SONET and 43G OTN test solution available today. The flexible, robust STT 40G takes the STT platform to a new level as a test and measurement solution for high speed transport networks.

Ideal for network element field installation and maintenance tests, the STT 40G provides the options for both line and client sides; 43G DPSK modulation with a tunable transmitter for line side verification, and NRZ for client side field verification.

- Comprehensive Optical Transport testing – OTN, SONET and SDH test capabilities
- NRZ modulation for client side verification
- 43G DPSK modulation with tunable transmitter for Network Element line side verification
- 10/10.7G auxiliary port for interconnections to other 10G systems, to extend test capabilities
- Complete SONET/SDH mapping (down to VC12, VC11, VT1.5 and VT2)
- Intuitive user-friendly and full-featured graphical user interface
- Cost effective solution can be used as a stand alone module, self-contained portable instrument, or as a 40/43G complement to an existing STT Optical Network Expert (ONE)



## Optical Network Expert Module

The powerful STT Optical Network Expert (ONE) module simplifies the complex tasks of installing and maintaining OTN networks. The STT ONE verifies a wide range of network performance issues, including end-to-end connectivity, forward error correction capabilities, asynchronous/synchronous mapping of SONET/SDH client signals, and conformance to ITU-T G.709 OTN recommendation.

- OTN
  - OTU1 and OTU2 testing
  - ODU Time Division Multiplexing testing (ODU1 into OPU2 mapping)
- Ethernet over SONET/SDH (EoS)
  - Generic Framing Protocol (GFP)
    - Framed (GFP-F)
    - Transparent (GFP-T)
  - VCAT/LCAS testing
  - RFC 2544 benchmark tests for Ethernet over SONET/SDH
  - Packet capture and protocol analysis
- Legacy
  - SONET/SDH testing
  - Channel Master for in-service monitoring of SONET/SDH tributaries
  - PDH/T-carrier testing



## Metro Module

The STT Metro module combines Ethernet and Fibre Channel test and measurement capabilities in a single instrument.

The module comes with four and eight port options; each port can generate up to 64 streams. The Ethernet ports can be configured at 10/100 MbE, 1 GbE Base-T, or 100/1000 BaseX, with a 1, 2 and 4 Gigabit Fiber Channel option. For powerful network stress testing, STT Metro supports testing multiple connections and user-defined frames, including network bandwidth load allotment.

STT Metro is ideal for testing data and storage network services on the Metro backbone.

- Class of Service (CoS) and Type of Service (ToS) testing across multiple traffic streams
- Metro Ethernet Forum (MEF) compliance testing
- Service Level Agreement (SLA) verification for Ethernet and IP networks
- Simultaneous service activation on multiple ports
- Support for 802.3ah Link OAM discovery and loopback functions
- Packet Delay Variation measurement per RFC3393



## 10G Ethernet Module (LAN, WAN)

The STT 10G Ethernet module is a comprehensive and versatile solution for the installation and management of 10 Gigabit Ethernet networks. Designed for central office applications, service verification, and network element testing, the 10G Ethernet module has multiple interfaces from 10 Mb to 10 GbE. The optical ports accept hot-swappable plug-in SFP modules supporting 850nm, 1310nm and 1550nm WDM interfaces. The STT 10G Ethernet module is compatible with the MTT GigE module, including BERT and loopback tests.

- BER and throughput testing up to Layer 4 at full wire speed, with configurable traffic shaping and frame length
- User-defined MAC/IP/VLAN configuration settings for up to 128 simultaneous traffic flows
- Pass-through mode monitoring of live network traffic
- Packet capture and protocol analysis decode up to Layer 7



The STT platform provides best in class scalability, portability and performance in a single powerful optical transport test instrument. Capable of operating on battery power and on both AC or DC power, it is suitable for both central office and field applications.

The STT family is flexible enough to provide comprehensive testing for nearly any type of optical transport, including OTN, SONET/SDH, Ethernet and Fiber Channel.

A suite of fully automated tests which are setup and executed from a simple, intuitive graphical user interface makes powerful verification expertise available for even the novice user.



- Ethernet testing from 10 Megabit to 10 Gigabit
- OTN testing up to 43G
- Available 43G DPSK modulation
- SONET/SDH up to 10G, PDH/T-carrier testing
- Cost effective, full-featured, stand-alone package
- Remote operation
- Lightweight, portable, battery backed installation and maintenance test platform



## STT Family Brochure

Deliver Multi-Service Quickly and Cost-Effectively

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