RXT-6000e

100G Multi-Service Module

The RXT-6000e is the most complete and flexible portable 100G test set in the market. Equipped with most common transceiver form-factor ports and optional legacy test interfaces, this module is a perfect complement to the RXT® Platform, extending its testing range to 100 Gbps and offering up to two simultaneous 100GE tests.

Installation, commissioning, monitoring and maintenance tasks are simplified thanks to a combination of intuitive features and powerful test functions. Novice users benefit from the easy-to-use GUI, while experienced users will appreciate an array of advanced features such as OTL/PCS, CAUI-4/XLAUI Lane BERT, overhead monitor/control, Tandem Connection Monitoring, Service Disruption, Protocol Capture/Decode, BERT, Throughput test, and much more.

MODULE HIGHLIGHTS

General

- CFP2 (LR4 & SR10) and QSFP28 interfaces for 100GE, OTU4 and 50GE applications
- Supports IEEE 802.3bj Clause 91 RS-FEC as required for SR4 and SR10
- CFP4 support via CFP2-to-CFP4 adapter
- QSFP+ for 40GE, OTU3
- SFP28 interface for 25GE, 32/16G FC, 24G CPRI 10 and 25G eCPRI Layer 4 with RS-FEC
- SFP+ for 100Base-FX, 1000Base-X, 10GEBase-X, OTU2/2e/1e/1, STM-64/16/4/1/0, OC192/48/12/3/1, and Fibre Channel 16/10/8/4/2/1G and CPRI up to 12G
- RJ45 for 10/100/1000Base-T applications
- Optional PDH/DSn with standard connectors

Ethernet Testing

- Optical 100 Mbps to 100 Gbps Ethernet testing, including 25GE and 50GE
- Electrical 10/100/1000 Mbps Ethernet testing
- Dual-port testing capabilities
- Optical Lane BERT and CAUI-4/XLAUI Lane BERT
- PCS Layer Testing with Skew generation/monitoring
- Multi-stream testing up to 32 independent streams
- IEEE 802.3ah, ITU-T Y.1731, IEEE 802.1ag, and MPLS-TP OAM support
- RS-FEC support for SR4 and SR10 transceivers
- Q in Q (VLAN stacking), MPLS, MPLS-TP, PBB, EoE support
- MAC flooding
- RFC2544 and V-SAM (Y.1564) testing
- IPv4 and IPv6 traffic generation
- BERT and Throughput testing at Layer 2 and Layer 3
- Smart Loopback mode for Layer 2 and Layer 3
- One-Way-Delay latency measurement (GPS assisted)
- Line rate packet capture with Wireshark™ decode
- Error and Alarm Injection

CPRI Testing

- Common Public Radio Interface standard (CPRI) link performance verification
- Supports all Rate Options up to CPRI 10 (from 614.4 Mbps to 24.33 Gbps) per CPRI Specification v7.0
- Layer 2 Framed BER testing with PRBS stress patterns
- REC/BBU (master) and RE/RRH (slave) emulation
- Latency measurements
- Dual-port operation and bi-directional monitoring mode
- CPRI Hyperframe Capture

RXT-6000e

eCPRI Testing

- 25G eCPRI
- Dual-port testing capabilities
- RS-FEC support
- Multi-stream testing up to 32 independant streams
- Throughput testing at Layer 2 and Layer 4
- IPv4 and IPv6 support
- Q in Q (VLAN stacking) and MPLS support
- High accuracy One-Way-Delay latency measurement (GPS assisted)
- Line rate packet capture

Fibre Channel

- Storage Area Networks (SAN) testing for 1G, 2G, 4G, 8G, 10G, 16G and 32G interfaces
- BERT and Throughput test
- RFC2544: Throughput, latency, frame loss, back to back tests Layer 1 and layer 2 loopbacks

OTN Testing

- OTN testing for OTU1, OTU2, OTU1e, OTU2e, OTU3, OTU4
- Complete multi-stage Mapping/Multiplexing
- Advanced multi-step Map/Mux with SDH/SONET/PDH/DSn test payloads
- Ethernet over OTN (EoOTN)
- ODUflex into ODU2, ODU3 and ODU4 with Bulk payload
- Service Disruption Time (SDT)
- Tandem Connection Monitoring
- Overhead monitoring and generation
- Terminate, Payload Through and Line Through test modes
- Per-lane optical power and frequency measurements
- External clock reference interface
- Histogram Analysis

SDH/SONET Testing

- Available as Line Rate or mapped into OTN payloads
- STM-0 to STM-64 and STS-1/OC-1 to OC-192
- Advanced multi-step Map/Mux with PDH/DSn test payloads
- Test payload multiplexing down to VC11/VT1.5 and internally generated PDH/DSn tributaries

PDH/T-Carrier Testing

- The test set provides optional legacy SDH/SONET/PDH and DSn test interface capabilities and sub-rates from 155M (STS3/ STM1), 55M, (STS1/STM0), 140 Mbps (E4), 34 Mbps (E3), 2 Mbps, 45Mbps (DS3), 1.5 Mbps (DS1), and G.703 64k codirectional.