

Carrier Ethernet Installation and Troubleshooting

MT1100A
Network Master Flex



Ethernet technology is used by many applications today, including Carrier Class Ethernet, VLAN, Q-in-Q, Ethernet OAM and MPLS and, recently, PBB and MPLS-TP. Network operators must handle all these technologies, leading to long and complex test procedures. The Network Master Flex MT1100A with Ethernet option is a comprehensive solution for easy testing, installing, and fast troubleshooting of Ethernet lines up to 100 Gbps using functions for verifying bandwidth, and testing connectivity, Quality of Service (QoS), and service availability, cutting additional truck rolls, tech support calls, and customer churn to improve operating expenses. Since the Ethernet technologies above are often carried on the network using OTN, the ability to test and validate services across these technologies within OTN is the key to meeting end-user objectives.

The all-in-one MT1100A supports all the latest communications network technologies.

Selecting and installing up to two modules from a range of three module options supports all-in-one R&D, manufacturing, installation and maintenance tests of network and transport equipment operating at bit rates from 1.5 Mbps to 100 Gbps. The large, 12.1-inch color LCD touch panel with easy-to-use GUI plus remote operation of a full range of test functions over an Internet connection greatly improves test efficiency and helps cut costs.



Key Platform Benefits and Features:

- All-in-one transport tester
 - Supports testing from 1.5 Mbps to 100 Gbps
 - OTN, Ethernet, CPRI/OBSAI, Fibre Channel, SDH/SONET and PDH/DSn
- OTN testing with Ethernet, CPRI, Fibre Channel, SDH/SONET client signals
- Easy and intuitive GUI
- Up to 4 ports at all rates
- Electrical interfaces of CAUI, XLAUI using optional extenders
- WLAN*/Bluetooth*/LAN connectivity
- PDF, CSV and XML report generation for documenting test results
- Remote operation using VNC or dedicated GUI operation software via Ethernet, WLAN
- Remote control (scripting, via Ethernet, WLAN, GPIB)
- Portable design for maximum portability
- Modular platform ensuring maximum return on investment

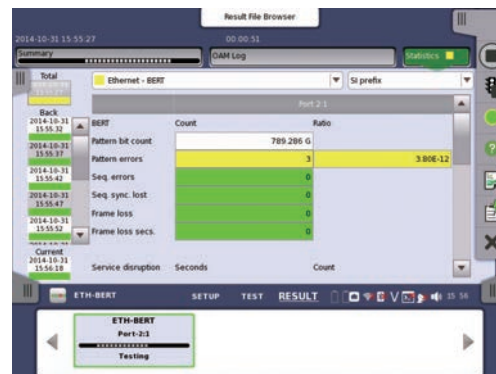
Key Ethernet Benefits and Features:

- Supports 100 Gbps, 40 Gbps, 10 Gbps, 1 Gbps, 100 Mbps, and 10 Mbps Ethernet tests
- Traffic generation up to full line rate
- Support for IPv4 and IPv6
- Ethernet Service Activation Test (Y.1564)
- Automated RFC 2544 tests of Throughput, Frame Loss, Latency or Packet Jitter, Burstability
- TCP Throughput option (RFC 6349, iperf) (up to 10 Gbps)
- BER tests – include Frame Loss and Sequence Error tests
- Service disruption measurements
- Comprehensive statistics
- Filters – to extract relevant parts of traffic
- Thresholds – to highlight abnormalities
- Simultaneous monitoring in both line directions
- IP Channel Statistics to identify error streams, top talkers, network attacks (up to 10 Gbps)
- Ethernet OAM tests
- 10G WAN-PHY tests
- Synchronous Ethernet test (ITU-T G.826x and IEEE 1588 v2) (up to 10 Gbps)
- Ethernet Multistream
- Stacked VLAN (Q-in-Q)
- MPLS, MPLS-TP and PBB tests
- Ping and Traceroute
- Frame capture for protocol analysis with Wireshark
- Electrical cable tests and optical signal level displays
- Event log
- Fiber end face inspection using VIP

*: Available for certified countries and regions including USA, Canada, Japan and all EU countries.



Simple and intuitive configuration of Y.1564 test



Color indications give an easy overview of GO/NO-GO results

Test Modules:

- 10G Multirate Module MU110010A
Up to 2 ports: 1.5 Mbps to 10 Gbps (SFP/SFP+, RJ45, BNC, RJ48, Bantam)



- 100G Multirate Module MU110011A
Single port: 40 Gbps (CFP) or 100 Gbps (CFP)
Up to 2 ports: 10 Mbps to 40 Gbps (QSFP+, SFP/SFP+, RJ45)



- 40/100G Module MU110012A
Up to 2 ports: 40 Gbps to 100 Gbps (CXP, QSFP+)



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