

Carrier Ethernet Installation and Troubleshooting

MT1000A
Network Master Pro



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 Pro MT1000A with Ethernet option is a comprehensive solution for easy testing, installing, and troubleshooting Ethernet lines up to 10 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 compact, battery-powered and easy-to-use Anritsu MT1000A with 10G Multirate Module MU100010A has everything in a single, handy tester needed to install and maintain communication networks from 1.5 Mbps to 10 Gbps. This portable, compact, lightweight instrument makes network field testing easy. Service engineers can read and interpret data from the tested network directly on the 9-inch color display with easy-to-understand indications and graphical symbols. And the GUI makes it simple to configure and operate the instrument at its full potential. The MT1000A has been designed for easy expandability, reducing initial costs, and facilitating step-by-step customized investment.



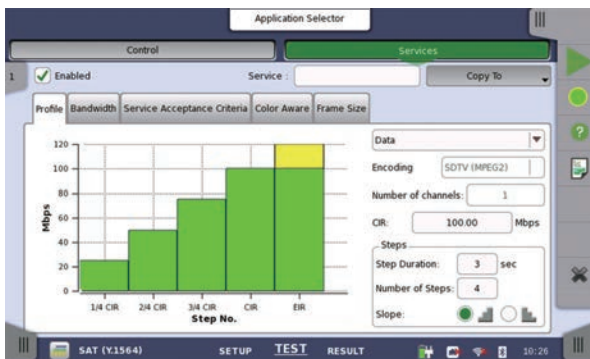
Key Platform Benefits and Features:

- All-in-one transport tester
 - Supports testing from 1.5 Mbps to 10 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
- Dual port at all rates
- WLAN*/Bluetooth*/LAN connectivity
- PDF, CSV and XML report generation for documenting test results
- Remote operation (VNC, Dedicated GUI software)
- Remote control (scripting, via Ethernet, WLAN, GPIB)
- Portable design for maximum portability
- Modular platform ensuring maximum return on investment

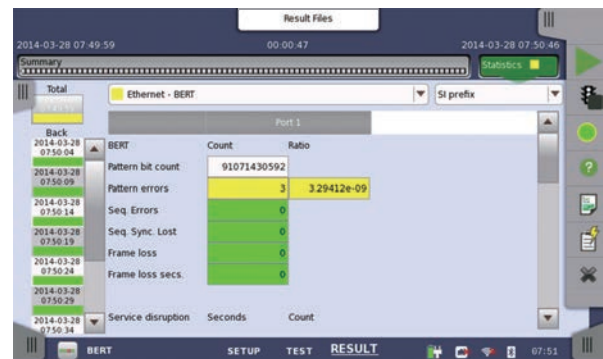
Key Ethernet Benefits and Features:

- Ethernet tests at 10 Gbps, 1 Gbps, 100 Mbps and 10 Mbps
- 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
- Ethernet OAM tests
- 10G WAN-PHY tests
- Synchronous Ethernet test (ITU-T G.826x and IEEE 1588 v2)
- 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

*: 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

Product Configurations

Model/Order No.	Name
–Mainframe–	
MT1000A	Network Master Pro
–Module–	
MU100010A	10G Multirate Module
–Options–	
MU100010A-001*1	Up to 2.7G Dual Channel
MU100010A-011	Ethernet 10G Single Channel
MU100010A-012	Ethernet 10G Dual Channel
MU100010A-020	TCP Throughput
MU100010A-051	OTN 10G Single Channel
MU100010A-052	OTN 10G Dual Channel
MU100010A-061	ODU Multiplexing
MU100010A-062	ODU Flex
MU100010A-071	CPRI/OBSAI Up to 5G Dual Channel
MU100010A-072	CPRI/OBSAI 6G to 10G Single Channel
MU100010A-073	CPRI/OBSAI 6G to 10G Dual Channel
MU100010A-081	STM-64 OC-192 Single Channel
MU100010A-082	STM-64 OC-192 Dual Channel
MU100010A-002	FC 1G 2G 4G Dual Channel
MU100010A-091	FC 8G 10G Single Channel
MU100010A-092	FC 8G 10G Dual Channel
MT1000A-003*2	Connectivity for WLAN/Bluetooth

Model/Order No.	Name
–Optional Accessories–	
G0311A	1G 850 nm SX SFP
G0312A	1G 1310 nm LX SFP
G0313A	1G 1550 nm ZX SFP
G0332A	100M FX 1310 nm MM SFP
G0333A	10G SR/SW 850 nm SFP+
G0356A	8G FC/10G SR 850 nm SFP+
G0329A	10G LR 1310 nm SFP+
G0315A	10G LR/LW 1310 nm SFP+
G0316A	10G ER/EW 1550 nm 40 km SFP+
G0318A	10G ZR/ZW 1550 nm 80 km SFP+
G0319A	Up to 2.7G 1310 nm 15 km SFP
G0320A	Up to 2.7G 1310 nm 40 km SFP
G0321A	Up to 2.7G 1550 nm 80 km SFP
G0328A	1G/2G/4G FC 850 nm SFP
G0322A	1G/2G/4G FC 1310 nm SFP
G0323A	1G/2G/4G FC 1550 nm SFP
G0306A	Video Inspection Probe
J1667A	GPIB-USB Converter

*1: Includes SDH up to STM-16, SONET up to OC-48, PDH (E1, E3, E4), DSn (DS1, DS3), OTN (OTU1) and Ethernet (1 Gbps, 100 Mbps, 10 Mbps).
 *2: Available for certified countries and regions including USA, Canada, Japan and all EU countries. Please contact Anritsu for updated information.

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