

IP Multicast Transmission Evaluation

Supports IGMPv1/v2/v3, MLDv1/v2 Host Emulation (V9.09 or newer)

Network Master Pro MT1000A

10G Multirate Module MU100010A

100G Multirate Module MU100011A

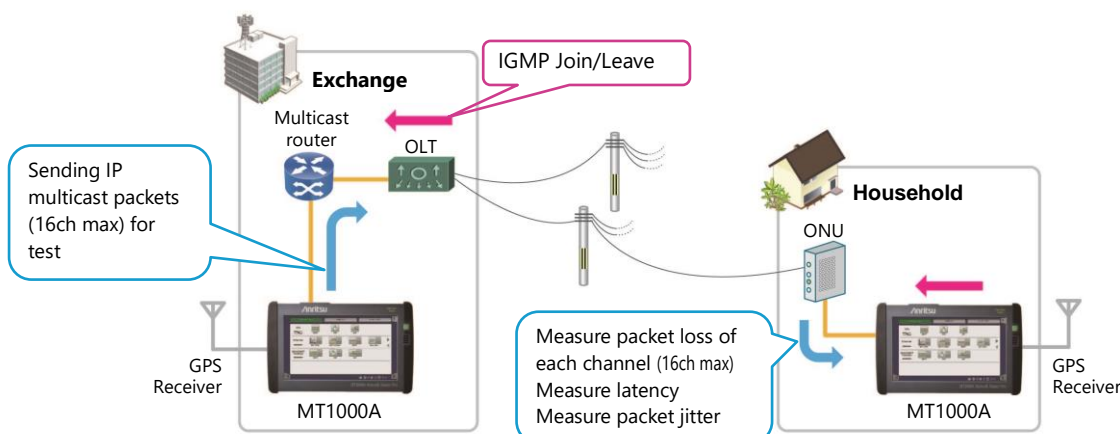
Key Features:

- MU100010A: Supports 10/100/1000M electrical to 10GbE
- MU100011A: Supports 10/100/1000M electrical to 100GbE
- Supports Ethernet, IPv4/v6, UDP/TCP, VLAN (multistage)
- Support installation tests (throughput, latency, packet jitter, BER measurement, QoS/CoS tests)
- Supports maintenance (simultaneous up/down traffic monitoring, all-in-one troubleshooting diagnostics)
- TCP throughput analysis
- Built-in automated test functions with automatic installation-test Pass/Fail function
- Remote smartphone (Android/iPhone) control using mobile router
- Simultaneous OTDR module installation



Video streaming and security cameras use IP multicast communications where a multicast router manages the hosts for each multicast group. For the host to receive the multicast stream, the multicast router must use either IGMP or MLD to join the multicast stream. The Network Master Pro MT1000A emulates IGMP and MLD to join and leave up to 16 group channels per measurement port.

Evaluation of IP multicast transmissions using two MT1000A units is shown in the following diagram.

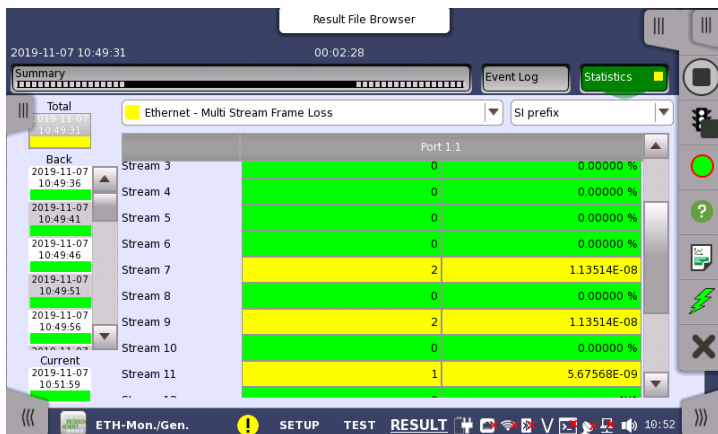


IP Multicast Test using FTTH

Pass/Fail criteria can be set for the packet loss count or loss rate, latency, and packet jitter for each channel to automate pass (green background) and fail (red background) evaluations for channel groups. In addition, the automatic test functions can be used for easy field evaluation of multicast transmissions.

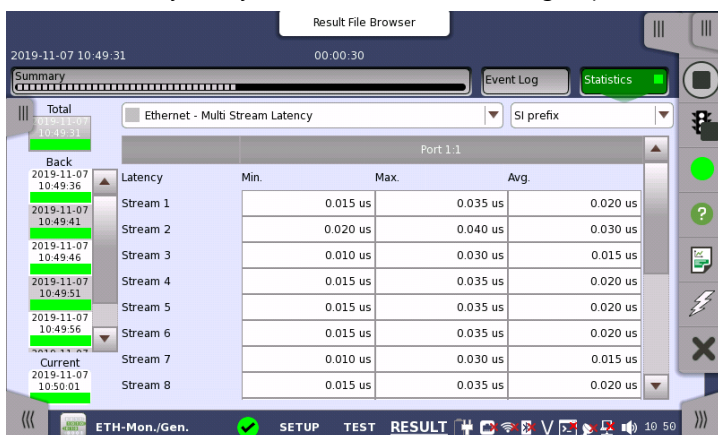
Packet Loss/Loss Rate Measurement

Measure packet loss and loss rate for each IP multicast group channel.



Latency Measurement*

Measure latency (delay time) for each IP multicast group channel.



*At latency measurement between two MT1000A units, each MT1000A must perform time synchronization using a GPS receiver.

Packet Jitter Measurement

Measure packet jitter for each IP multicast group channel.

