



Ether.DuaLoop (2 x 1)

in Test we Trust

ALBEDO Ether.DuaLoop is a traffic reflector equipped with two independent ports that can be set up and operate independently and simultaneously. Any remote tester loopback functions can relay on this advanced device when installing, maintaining or commissioning telecom services.

First class reflector

Ether.DuaLoop is really advanced because includes a friendly navigation with touchscreen to implement the L1-L4 loopback functionality resulting ideal for engineers willing to execute test such as BER, RFC-2544 or eSAM. Moreover, additional functions such as traffic analysis and statistics, filters, SNMP and VNC remote control have also been included.

This outstanding device is built in a powerful platform, the same used by the Gigabit Ethernet testers manufactured by ABEDO. Therefore it is an excellent option to consider for those operators and contractors willing to manage and troubleshoot fixed and mobile networks.

Double Port: 2xSFP + 2xRJ45

Ether.DuaLoop has two ports that provide a complete set of electrical and optical interfaces from 10Mb/s to 1Gb/s by means of SFP. Save time and costs conducting bench testing with this excellent instrument. An interesting configuration is to connect the unit as a media converter, passing electrical to optical, or optical-optical using different fibre types.

Leave it into the network!

Interestingly the unit supports pass-through mode therefore it can be installed at any point of the network, for instance at a demarcation point. During normal operation Ether.DuaLoop can be totally transparent to the service.

However if something goes wrong the unit can be switched to loopback mode necessary any performance or quality test would loop back packet to both sides simultaneously and will help to discover at what side the fault is avoiding disputes and litigation among Operators and Customers while accelerating the deployment of competitive services.

Traffic Statistics

A complete set of traffic statistics and counters is provided in separate reports classified per each port sorted by MAC address, Type/Length, C-VID, S-VID, CoS and Priority with selection mask. Also by IPv4 and IPv6 Selection including address, protocol, DSCP; and TCP/UDP selection or ports.

Traffic Scan and Discovering

Ether.DuaLoop can quickly scan the network traffic to select those flows to be tested and choose whether you want to monitor or execute any test. Consequently not anymore slow set up, or deep expertise.

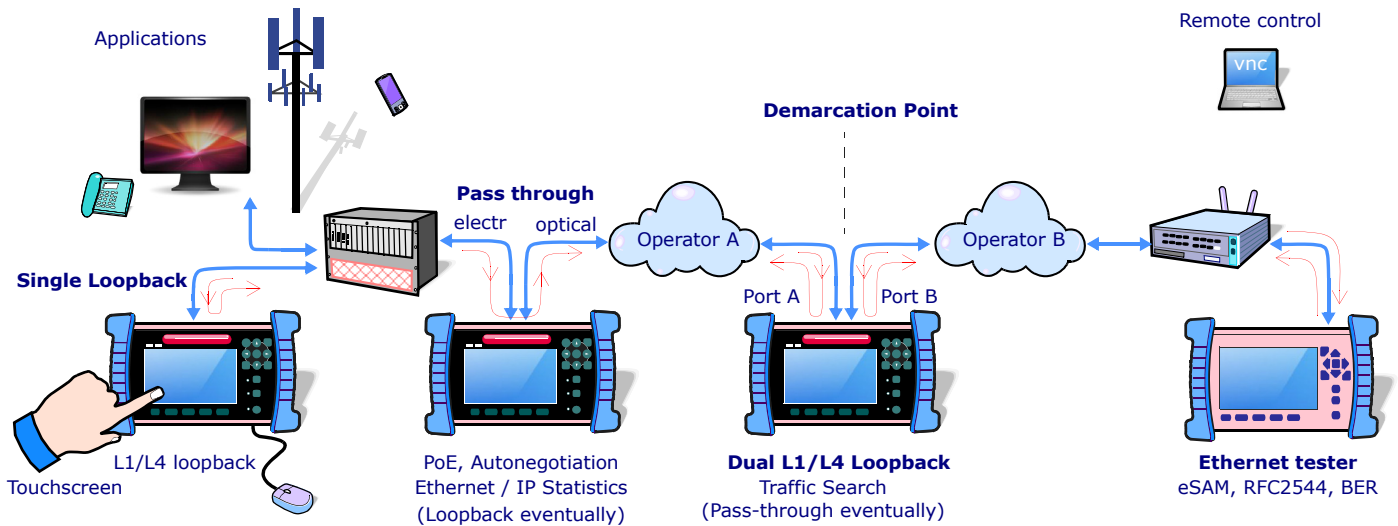
USERS

- Operators / Contractors
- Commission
- Troubleshooting

TOP FEATURED

- Two independent Ports
- 2xSFP and 2xRJ45
- Touchscreen, mouse
- SNMP and VNC control
- Advanced statistics
- L1, L2, L3, L4 loopback
- Multivendor reflector





Ethernet Testing	
Interfaces	<ul style="list-style-type: none"> Dual RJ-45 port for electrical connection 10/100/1000BASE-T: PoE detection and PoE transparency 2 x SFPs ports: 10BASE-T, 100BASE-TX, 100BASE-FX, 1000BASE-T, 1000BASE-SX, 1000BASE-LX, 1000BASE-ZX and 1000BASE-BX Autonegotiation: Bit rate at 10, 100, and 1000 Mbit/s, Disable autonegotiation and direct set up EtherType II (DIX v.2), IEEE 802.3, IEEE 802.1Q, and IEEE 802.1ad IEEE 802.2-LLC1 and IEEE 802.3-SNAP IPv4 (RFC791), IPv6 RFC2460
Operation Modes	<ul style="list-style-type: none"> Pass-through Loop-back (single port and double port)
Loop-back	<ul style="list-style-type: none"> L1 (wire loopback) at the far end Rx is forwarded to Tx L2 (frame), MAC addresses are swapped L3 (packet) IP addresses are swapped L4 (application) ports are swapped Loop controls for broadcast and ICMP frames
Results	<ul style="list-style-type: none"> SFP: Presence current interface, Vendor, Part number Optical power (over compatible SFP) PoE (IEEE 802.3af), PoE+ (IEEE 802.3at), none; PoE voltage between pairs in endpoint; Voltage and current in through mode Twisted Cable: MDI/MDI-X status, Open (fault distance), Cable Length Test, Short (distance), Polarities, Pair Skew, Crosstalk Autonegotiation: Current bit rate, Duplex mode
Filters	<ul style="list-style-type: none"> Up to 8 filters for Counts and Statistics at MAC, IP, TCP/UDP, Arbitrary [mask + offset] Ethernet Selection: MAC address, Type/Length, C-VID, S-VID, CoS and Priority with selection mask IPv4 and IPv6 Selection: address, protocol, DSCP, Flow (v6): single value or range TCP/UDP Selection: port: single value or range
Statistics	<ul style="list-style-type: none"> Separate reports per Port A & B, Tx/Rx (transmit & receive), Active filter, Automatic filtering blocks for top talkers Top 16 talkers: Sour/Dest MAC / IPv4 / IPv6 addresses, VID (VLAN), C-VID (Q_in_Q), S-VID (MPLS) Ethernet Frame Counts (RFC 2819): VLAN, Q-in-Q, Priority, Control, Pause, BPDUs Tx/Rx Uni-Multi-Broadcast, Errors, Undersized, Oversized, Fragments, Jabbers, Runts, (Late) Collisions, Sizes, MPLS stack length Bandwidth Statistics: (in bit/s, frame/s, %) Rate, Max, Min, Aver, Occupancy, Unicast, Multicast, Broadcast IPv4 & IPv6 counts: (in bit/s, frame/s, %) Unicast, Multicast, Broadcast, Errors, TCP, UDP, ICMP

Operation and Management	
Performance	<ul style="list-style-type: none"> Full Duplex operation at 1 Gbit/s or 1,5 Mframes/s, Accuracy better than 10⁻⁶ secs. at 1 Gbit/s Performance and accuracy 100% independent of the line bit rate

Platform	
Hand-held Instrument	<ul style="list-style-type: none"> Touchscreen 480 x 272 TFT, Mouse, USB & Ethernet ports; 1.0 kg, 223 x 144 x 65mm; IP-54 Soft LEDs All events at a glance Rechargeable Batteries continuous working up to 12 hours continuous operation (fast recharging time) AC Power Adapter Input: 100 ~ 240 V AC, 50/60 Hz, Operating Temperature 0°C ~ 50° C Storage Temperature -20°C ~ 70°C Humidity 5% ~ 95%; IP rating 54 SNMP, MIB and VNC remote control

