



GPON Doctor OLT-e has been designed primarily for ONT/ONU conformance and network interoperability testing, the GPON Doctor OLT-e is a perfect tool for lab application engineers involved in the GPON pre-deployment phase, as well as GPON network element vendors.

Datasheet

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GPON Doctor OLT-e the smart OLT

GPON Doctor OLT-e serves as an OLT, designed specifically for ONT/ONU interoperability testing. It is a reference tool for laboratory engineers involved in the planning phase of GPON networks and manufacturers of active GPON elements. The OLT-e is an ideal complement to the GPON Doctor 2500/4500/10000, as it converts the captured data into scripts that enable commercial OLT behaviors to be emulated.

1. General

- Essential tool for optimal deployment of GPON networks
- Interoperability troubleshooting
- Multi-vendor equipment coexisting in the access network
- Assess protocol compliance in OLT/ONT development
- New GPON network deployment
- ONU development
- ONU certification
- Diagnosis and testing of events and deviations
- Interoperability troubleshooting
- Multi-vendor equipment co-existing in a Telco access network
- Protocol compliance assessment during GPON ONT development
- Detect rogue and underperforming ONTs
- GPON troubleshooting within a deployed FTTH network
- ONU testing within the production chain

2. Operation

2.1 Features

- Meets the requirements of ITU-G984.3
- Supports management entities defined in ITU-T G.988
- GPON B+ SFP optical interface compliant with ITU-T G.984.2 standard
- Supports up to 60 km range and 1:64 splitting ratio
- OMCI message creation using programmable templates
- Sending of individual OMCI messages
- TCL scripts for multiple OMCI
- OMCI master behaviour
- Multiple OLT templates
- Generating and forwarding Ethernet traffic encapsulated in GEM frames
- Receive asynchronous events and alarms from the ONTs
- Generation of PLOAM messages to activate and configure a detected ONT
- Simultaneously manage and monitor multiple ONTs
- Fault injection and GEM encapsulation manipulation
- Supports 802.1 ad, 802.1Q and 802.1p

3. Interfaces

3.1 GPON

- 1 x SFP GPON ports
- B+ and C+ transceivers available

- 1 x SFP+ 10G for transport , allowing 100% GPON BW utilisation
- 1 x 10/100 Ethernet management port

Downstream

- SFP Single mode 1490nm (2,5Gbps) module
- SM 1310nm optional

Upstream

- Single mode 1310nm (1,25Gbps)

Transport

- 10Gbps XFP interface
- 4 x 1000BASE-T

4. Platform

- Operating Temperature: 0 to +50°C
- Optional rack mounting accessories
- Rugged portable form factor

4.1 Console

- 1 x USB
- 10/100/1000BASE-T

4.2 Power

- External power supply
- Independent power button

4.3 Physical

- Size: 202 x 278 x 44.45mm
- Weight: 1.6 kg
- Carrying case with accessories 9kg

