FIBERLINK 30028
GPON OLT

DESCRIPTION

OLT GPON with 8 ITU G.984 compliant GPON interfaces, 8 electrical Gigabit Ethernet (GE) interfaces and two optical 10 Gigabit Ethernet ports. Each PON port supports up to 128 ONUs (Optical Network Unit), totaling 1024 GPON users. Compact (1 RU – Rack Unit), the OLT GPON Fiberlink 30028 supports a full set of network services and topologies on Ethernet ports.

The Fiberlink 30028 OLT is a high-capacity OLT designed to serve ultra-broadband services to a large number of users quickly and cost-effectively.

It presents features that allow the management and expansion of the network, such as Link Aggregation (LACP), in addition to IGMP protocol features (for streaming video solutions). It has power through redundant AC and/or DC sources. Allows temperature monitoring of coolers and ease of maintenance in the occasional field replacement. It allows the connection in a ring topology between up to 44 OLTs, via RSTP or ERPS protocol.

HIGHLIGHTS

✓ GPON interfaces supporting extended reach of up to 100 km
✓ "Type B" redundancy of GPON interfaces for critical services.
✓ Total UPLINK up to 28Gbit/s
✓ ERPS (Ethernet Ring Protection Switching) protocol with sub-50ms recovery
✓ Complete provision through CLI or Parks Easy (graphic interface)
✓ Advanced QoS mechanism in hardware, allowing L2 or L3 packet analysis (IPv4 and Ipv6)
✓ Support for 4096 simultaneous VLANs
✓ VLAN: hybrid mode port operation (QinQ and trunk simultaneously)
✓ PPPoE Intermediate Agent
✓ DHCP Relay Agent Information Option
✓ VLAN isolated function: Client isolation, even if belonging to the same VLAN
✓ Monitoring of cooler operation and possibility of exchanging coolers in the field, without the need to send the product to technical assistance
✓ Up to 128 ONUs per GPON interface

TECHNICAL SPECS

INTERFACES

GPON INTERFACES

8 SFP GPON ITU-T G.984 Interfaces

1490nm downstream wavelength

1310nm upstream wavelength

Forward Error Correction (FEC) in upstream (US) and downstream (DS)

Upstream rate of 1.25 Gigabits/s

Downstream rate of 2.5 Gigabits/s

Downstream traffic protection through AES encryption with 128 bits key

Support for static and dynamic bandwidth allocation (SBA/DBA)

Reach of up to 20 km for each GPON interface

Support for extended reach of up to 100 km (with maximum window of 40 km)

Support for the 5 types of T-CONT (VoIP, IPTV, Management, Internet, Unspecified)

Up to 1024 GEM Ports per GPON interface

Up to 384 T-CONTs per GPON interface

Up to 128 ONUs per GPON interface

ETHERNET INTERFACES

Ethernet Switch with 8 RJ45 electrical ports

Ethernet Switch with up to 2 slots for 10GbE SFP+ modules

MANAGEMENT AND SECURITY

Configuration through command line (CLI) and management system (Parks Easy) via SNMP

SNMP v2c, v3, and RFC1213

SNMP transport via UDP or TCP protocol

NTP client with support for multiple servers

Authentication via Radius and TACACS+ servers

In-band or out-of-band management (dedicated physical interface)

Remote management via SSH or Telnet secure protocol

Local and remote syslog

Firmware upgrade via FTP with support for two images to improve security

Support unlimited number of images (versions) *

Unlimited number of configuration files *

Monitoring the operating status of ventilation fans

Possibility of field exchange of the ventilation module

Monitoring the internal temperature of the equipment

In-band management interface access via specific and configurable VLAN (VID and CoS)

SSH access with DSA key mechanism

Offline Provisioning of ONUs

FUNCTIONALITIES

LAYER 2 AND VLAN

Ethernet bridging with non-blocking architecture for all packet sizes

187,5Mpps (million packets per second) processing capacity

96Gbit/s commutation capacity

Flux control (IEEE 802.3x)

MAC address table with 16k entries

Support for 4095 VLANs

VLAN tagging via port, MAC, or Ethernet protocol (IEEE 802.1Q)

Q-in-Q VLAN (IEEE 802.1ad)

VLAN trunking and VLAN mapping

RSTP – Rapid Spanning Tree Protocol (IEEE 802.1w)

ERPS (Ethernet Ring Protection Switching) with sub-50ms recovery

DHCP Relay Agent Information Option (DHCP Relay Agent Option 82)

PPPoE Intermediate Agent (PPPoE tag)

LACP for dynamic aggregation of Ethernet ports

Support for L2 protocols transparency

Support for jumbo frames of up to 12000 bytes

IGMP Snooping v1/v2/v3

IGMP snooping with proxy reporting

IPTV streams forwarding

MAC Filtering

Port mirroring

Client isolation, even if they belong to the same VLAN (VLAN isolated)

Connectivity between clients, even if they belong to the same GPON port (port bridging)

Flexible ACLs (layer 2, 3, and 4) that can be defined by port or by VLAN

QoS

8 priority queues per physical port

WRR or SP scheduling

Bandwidth control in ingress port

Bandwidth control in egress port

Traffic marking and classification

DSCP field remarking

CoS field remarking

DSCP Mapping to CoS through VLAN

MECHANICAL, ELECTRICAL AND ENVIRONMENTAL FEATURES

POWER SUPLY

Two redundant sources

DC power supply option with a -48 VDC input

AC power supply option with full-range input (100~264VAC / 50~60 Hz)

CONSUMPTION

Maximum 50W

ENVIRONMENT

0°C to 55°C (32°F to 131°F)

0 to 95% (non-condensing)

WEIGHT AND DIMENSIONS

W x H x D: 483 mm x 44 mm x 240 mm

19-inch mechanics and 1RU height

Lateral edges adjustable on installation

Weight: 2,95kg

For more information, visit www.parks.com.br.

The information presented in this document is subject to change without previous notice.