FIBERLINK 40016
GPON OLT

DESCRIPTION

Fiberlink 40016 is a GPON OLT compliant with ITU-T G.984 and ITU-T G.988 recommendations. It has 16 GPON ports, 4 1GE (Rj45) ports and 4 10 GE ports on SFP+ connectors. Each PON port supports up to 128 ONUs (Optical Network Unit), having a total capacity of 2048 subscribers (ONU/ONT).

It is a compact 1U high (1 RU – Rack Unit) solution, compatible with a 19-inch rack. Supports AC or DC power on standalone, redundant, hot-swappable power supplies. It also has a hot-swappable fan module.

Its power supplies, both AC and DC, receive electrical connections from the back of the OLT, improving the finish and preventing electrical cables from getting in the way of optical cables. The removal of the sources, if necessary, can be done from the front of the equipment, without the need to remove the power cables, facilitating the operation in the most diverse installation scenarios.

It has features that allow the management and evolution of the network, such as Link Aggregation (LACP), in addition to IGMP protocol features (for streaming video solutions).

HIGHLIGHTS

- ✓ GPON interfaces supporting extended reach of up to 100 km
- ✓ "Type B" redundancy of GPON interfaces for critical services.
- ✓ 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 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 SPECIFICATIONS

INTERFACES

GPON INTERFACES

16 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 4 RJ45 electrical ports

Ethernet Switch with up to 4 slots for 10/2.5/1 GbE 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

Network protection through the Link-Flap function, which disables ports with intermittent physical connection

DHCP Snooping

(*) Number of images and configuration files is limited to the available flash memory of the device

FUNCTIONALITIES

LAYER 2 AND VLAN

Ethernet bridging with non-blocking architecture for all packet sizes
195Mpps (million packets per second) processing capacity
100Gbit/s commutation capacity
Flow 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 à CoS through VLAN

MECHANICAL, ELECTRICAL AND ENVIRONMENTAL FEATURES

POWER SUPLY

Two redundant sources with hot plugging (hot-swappable type)

DC power supply option with a -36 to -72 VDC input

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

CONSUMPTION

Maximum 65W

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.