OLT POL 20008
GPON OLT

DESCRIPTION

Parks' POL (Passive Optical LAN) family of equipment was developed exclusively for applications on LANs and includes specific features for use in enterprise networks.

A platform based on passive optical network technology that makes possible the real convergence of corporate networks, with low CAPEX and OPEX.

The solution is complemented by various types of user terminals (ONT - Optical Network Terminations) that allow to integrate besides voice, data and video/image communication, also security and automation systems and more.

HIGHLIGHTS

✓ GPON interfaces supporting extended reach of up to 60 km
✓ "Type B" redundancy of GPON interfaces for critical services.
✓ UPLINK of up to 20Gbits/s
✓ ERPS (Ethernet Ring Protection Switching) protocol with sub-50ms recovery
✓ Complete provision through CLI or Parks NMS (graphic interface)
✓ Integrated Ethernet Switch with capacity for 108Gbit/s routing and MAC table of 32k addresses
✓ 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
✓ Port bridging function: connectivity between clients, even if belonging to the same GPON port

TECHNICAL SPECIFICATIONS

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 (with up to 32 ONUs per GPON interface)

Support for extended reach of up to 60 km (with maximum window of 20 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 64 ONUs per GPON interface

ETHERNET INTERFACES

Ethernet Switch with 8 slots for electrical or optical SFP modules

MANAGEMENT AND SECURITY

Configuration through command line (CLI) and management system (Parks NMS) 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

Access to the in-band management interface through specific and configurable VLAN (VID and CoS)

Supports configuration files import and export

SSH access with DSA keys mechanism

Off-line ONUs provision

Provision of Port Security and 802.1X functionalities of the network's ONUs

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

DHCP Snooping function

FUNCIONALITIES

LAYER 2 AND VLAN

Ethernet bridging with non-blocking architecture for all packet sizes

160Mpps (million packets per second) processing capacity

108Gbit/s commutation capacity

Flux control (IEEE 802.3x)

MAC address table with 32k 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

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 SUPPLY

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

DC power supply option with a -48 VDC (+ 25%) entry

AC power supply option with full-range entry (90~132VAC and 187~264VAC)

CONSUMPTION

Maximum 80W

ENVIRONMENT

0℃ to 65℃ (32℉ to 149℉)

0 to 95% (non-condensing)

WEIGHT AND DIMENSIONS

19-inch mechanics and 1RU height

Lateral edges adjustable on installation

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

Weight: 3,6kg

PARKS

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

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