

FIBERLINK 3001

ROUTER & MEDIA GATEWAY



DESCRIPTION

Parks' Media Gateways line allows the migration of legacy services to IP networks without the loss of investment made in TDM network-compatible equipment, such as PABX centrals.

When transforming the TDM data derived from the TDM PABX in Voice over IP (VoIP) packets, Media Gateway allows full integration without the need for additional equipment.

Built to operate even over non-ideal IP networks, Parks' Media Gateways line stands out for its versatility, sturdiness and high performance.

The Fiberlink 3001 model also has an integrated GPON ONU compliant with the ITU G.984 standard. These models allow the integration of the local network (LAN) directly into the GPON, dispensing additional equipment, facilitating provision and maintenance, as well as reducing installation and operational costs.

HIGHLIGHTS

- ✓ Voice Media Gateway
- ✓ High performance Ethernet Router with support for advanced L3 services such as BGP, VRRP, and VRF, and advanced QoS, ensuring the quality of triple-play services
- ✓ IPv4 and IPv6 routing
- ✓ Interconnects legacy PABX (TDM) to the voice over IP (VoIP) networks without affecting data services
- ✓ 1 E1 port, supporting up to 30 simultaneous connections
- ✓ G.711 (A-law, U-law), G.723.1 (5.3, 6.3), G.726 (16, 24, 32, 40 Kbps), and G.729 codecs
- ✓ Collect call blocker
- ✓ DTMF transport with RFC2833
- ✓ PABX compatible with CAS/R2 or ISDN-PRI signaling
- ✓ Adaptable or fixed 200ms jitter buffer
- ✓ Supports FAX and caller ID
- ✓ OSPF (RFC2328) and OSPFv3 (RFC5340)
- ✓ VRF light
- ✓ VRRPv3
- ✓ BGPv4 (IPv4 e IPv6)
- ✓ Portbased VLAN
- ✓ DHCP Server (RFC2131, RFC2132), Relay (RFC1542), and Client (IPv4 and IPv6) NAT/NAPTIPv4 over IPv6 and IPv6 over IPv4DNS Proxy (RFC3596)
- ✓ Dynamic bandwidth reallocation between service classes
- ✓ Differentiated Services (DiffServ) for classified packets prioritization;
- ✓ Manageable via Telnet or SSHv2
- ✓ SNMPv1, SNMPv2, and SNMPv3 agents, with support for MIB II, IFTable and proprietary MIBs
- ✓ Integrated ITU G.984 GPON ONU
- ✓ Integrated Active Ethernet port
- ✓ Operates simultaneously in router and bridge modes
- ✓ Green Ethernet - Energy-Efficient Ethernet
- ✓ Easy installation and configuration

TECHNICAL INTERFACES

INTERFACES

SFP OPTICAL INTERFACE

SFP compatible:

- 1000BASE-T
- 1000BASE-SX
- 1000BASE-LX
- 1000BASE-ZX
- 1000BASE-BX

SFF OPTICAL INTERFACE GPON/AE

Single-mode SC/APC female plug connector

Class B+ optical module

1310nm upstream (Tx)

Optical transmission potency: +0.5 to +5.0 dBm

Reception sensibility: -8 dBm to -28dBm

GPON ITU-T G.984 standard compliant:

- G.984.1 General Characteristics
- G.984.2 Physical Media Dependent (PMD) layer Specification
- G.984.3 Transmission convergence layer Specification

1490nm downstream

1310nm upstream

Maximum 2.488 Gbps Downlink/1.244 Gbps Uplink data rate

Maximum reach of 20 km per GPON interface

ELECTRICAL ETHERNET GIGABIT

10/100/1000 Mbits

RJ45 plug

Auto MDI-X

E1

120 ohms impedance

ITU-T Standards: G.703 and G.704

Echo cancellation with up to 128ms of coverage

Caller ID (DNIS and ANI)

CRC4 statistics, SLIPS, clock mode, framing mode, link, frame synchronization, out of frame, line code violation, link synchronization

Primary or line clock

Operating status LED indicator

FUNCIONALITIES

VoIP

Coding: G.711 (A-law, U-law), G.723.1 (5.3, 6.3), G.726 (16, 24, 32, 40 Kbps), and G.729

Voice Active Detect (VAD) with configurable threshold

Comfort Noise Generation (CNG)

G.168 echo cancellation

VoIP Jitter Buffer with up to 200ms in adaptive or fixed mode

Multiple dial plans

Supports up to 30 (1E model) or 60 (2E1 model) simultaneous connections with any codec

Real Time Protocol (RTP)

Digit manipulation

Regular expressions for dial plans

Payload-type definition for RFC 2833

Collect call blocker

PABX

CAS/R2 signaling

ISDN-PRI signaling

R2 or ISDN-PRI collect call signaling

FAX

Supports FAX via T.38 or transparent G.711

Fax transmission fallback with G711 in case of T.38 protocol failure

CALL SIGNALING

SIP signaling

Speech Detection Threshold (RFC2327)

CAS (ITU-T2, ITU-T: Q.400, Q.411, Q.421, Q.422, Q.440-Q.422, Q.450-Q.452, Q.454, Q.455, Q.447, Q.458, Q.460-Q.468, Q.470-Q.476, Q.850)

Supports Brazilian signaling standards, including collect calls

DTMF

Supports in-band and out-of-band signaling (RFC 2833)

SIP

Registration in SIP servers

NAT traversal

DSCP marking in SIP and RTP packets

PRACK

Release Causes with SIP error code

VLAN

VLAN PUSH and POP

Portbased VLAN

VLAN Trunking or Access

VLAN Stacking (QinQ)

VLAN translation

ROUTING

IPv4 and IPv6 routing

Static routing

Fluctuating traffic by weight or by object track

Routing between VLANs

Dynamic traffic authorization through MD5 (RFC1321)

OSPF (RFC2328) and OSPFv3 (RFC5340)

RIPv1 (RFC1058), RIPv2 (RFC2453), RIPv3 (RFC2080)

VRF light

VRRPv3

BGPv4 (IPv4 and IPv6)

PIM-SM

ADDRESS MANAGEMENT

DHCP Server (RFC2131, RFC2132), Relay (RFC1542), and Client (IPv4 and IPv6)

NAT/NAPT

IPv4 over IPv6 and IPv6 over IPv4

DNS Proxy (RFC3596)

DNS Relay

Dynamic DNS

PPPoE client (RFC2516)

GPON

Supports static and dynamic bandwidth allocation (SBA/DBA)

Allows up to 256 port-IDs for Downstream and Upstream

IEEE 802.1Q compliant support for VLANs

Traffic prioritization by port, VLAN, VLAN + CoS (802.1p), or CoS only;

Authenticated activation via serial number or password

Supports GEM Port for multicast

Up to 7 T-CONTs

Downstream traffic protection through AES encryption with a 128 bits key

Downstream (Rate Limit) and upstream (Traffic Shaping) bandwidth limitation

GERENCIAMENTO E CONFIGURAÇÃO

Configuration via command line (CLI)

Telnet or SSHv2 servers for local or remote management

Management via NMS (Voice and AE functionalities via configuration templates)

SNMPv1, SNMPv2, and SNMPv3 agents, with support and MIB II

Import and export of local or remote configuration

Firmware upgrade via FTP, TFTP, HTTP and OMCI (present GPON interface)

NTP (RFC1305) with pairs authentication

Syslog

Dying Gasp

Firmware redundancy

Debug and diagnostics tools

SECURITY

Configuration mode protection via password with up to three levels of access

AAA authentication: TACACS (RFC1492), TACACS+, RADIUS (RFC2138, RFC2139)

SPI (Stateful Packet Inspection) type firewall

Packet filtering by port, source, or destination IP address, protocol, packet type, and TCP flags

QoS

Inbound traffic classification, marking, and conforming

Traffic classification via: IP address and L3 and L4 protocols

Dynamic bandwidth reallocation between service classes

5 QoS classes

Queueing strategy: FQ (Fair Queue), WFQ (Weighted Fair Queue),

CBWFQ (Class Based Weighted Fair Queue) and LLQ (Low Latency Queue)

Differentiated Services (DiffServ) for classified packets prioritization;

Hierarchical Token Bucket (HTB)

Discard prioritization policy

MECHANICAL, ELECTRICAL AND ENVIRONMENTAL FEATURES

POWER SUPPLY

Internal source INPUT: 110/220VCA OUTPUT: 12VDC@4A

93 to 253 VAC

MAXIMUM CONSUMPTION

Up to 15W

ENVIRONMENT

Operating temperature: 0°C to 50°C

Relative humidity: 0 to 95% (non-condensing)

WEIGHT AND DIMENSIONS

Weight: Up to 1.6kg

W x H x D (mm): 320 x 158 x 43



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

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