Alphion

Product Brief

ASEE-1972-1

XGPON Subscriber End Equipment (4GE + 1POTS + Wi-Fi6 + 2USB)

Feature Summary

- ITU-T G.9807.x compliant, BBF.247 ready
- BBF TR.156 VLAN Model compliant
- Desktop or Server-Rack mountable
- One XGPON port
- Four 10/100/1000 BASE-T Adaptive Ethernet RJ-45 port
- One FXS RJ-11 port
- Two USB 2.0 Host ports
- Wi-Fi6(AX-1800) support with 2x2 MIMO internal antennas for both 2.4GHz/5GHz Wi-Fi interfaces
- Supports 20/40M bandwidth in the 2.4GHz band and 20/40/80M bandwidth in the 5GHz band
- Supports Layer-2 switching with advanced data features such as Bridging, VLAN tag manipulation, classification, and filtering
- Supports NAT/NAPT, PPPoE, Gateway processing and other service processing functions
- Supports traffic management, QoS, multicast, encryption and decryption, and service flow classification
- Supports various CLASS services - Caller ID, Call Waiting, Call Forwarding, Call Transfer
- Provided rich support for CODECs, SIP (RFC3261) and MEGACO v2 (H.248), Echo Cancelling, VAD, CNG, static or dynamic jitter buffer
- Supports VoIP access by interfacing with external IAD box or Home Router with voice capability through the Ethernet Interface.
- Supports alarms and performance monitoring
- Supports remote software image download over OMCI, as well as activation and rebooting
- Supports dual software images with encoded checksum - working binary image & alternative binary image for image rollback
- Provided management locally via WebUI and remotely via OMCI and TR-069
- Support Dying Gasp alarm
- Supports 110V-240V AC Wall adapter

Applications

The Alphion Subscriber End Equipment Model ASEE-1972-1 is a XGPON product that has the characteristics of high reliability, good QoS guarantee, management and flexible networking. It is suitable for delivering triple-play services to the subscriber in Fiber-to-the-Home or Fiber-to-the-Premises applications, incorporating interoperability and cost-efficiency.

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Advanced High-Bandwidth technology

All functions and performance indicators of the ASEE-1972-1 device meet ITU-T and IEEE recommendations/specifications/standards. ASEE-1972-1 is fully FSAN (G.9807.x), supporting XGPON systems (9.95328 Gbps Downstream and 2.48832 Gbps Upstream).

Flexible Management

The ASEE-1972-1 can be Dual managed remotely from any XG(S)PON OLT via ITU-T G.988 OMCI channel and TR-069. It also supports Web based UI for local provisioning.

SPECIFICATIONS

XGSPON Uplink interface

Standard:	Fully ITU-T G.9807.x, G.984 and G.988 compliant
Line rate:	XGSPON - Downstream: 9.95328 Gbps, Upstream: 2.48832 Gbps
Connector:	SC/APC, single-mode-fiber;
Wavelength:	Transmit: 1270 nm; Receive: 1577nm
Tx Output power:	+4dBm
Rx Sensitivity:	-28dBm
Rx Overload:	-9 dBm
OLS/OTM:	G.984.2Amd2 incl. RX & TX power, dying gasp
TC layer:	FEC, Configurable AES decryption (both US and DS)
GEM port-IDs:	Up to 256, Flexible mapping between T-CONT & GEM port
T-CONT:	Type 1-5, up to 32

1G Ethernet interfaces

Type:	Four GE port; RJ-45 connector
Standard:	IEEE 802.3, 802.3u, 802.3ab, IEEE 802.3az, 802.3x
Link	10/100/1000 Base-T rate and full/half-duplex auto-negotiation and MDI/MDIX auto-sensing

Voice interfaces

Type:	1xFXS ports
Connector:	RJ-11 connector
Soft-switch Support	SIP, H.248

Wi-Fi WLAN interfaces

Standards:	2.4 GHz - 802.11b/g/n/ax 5 GHz - 802.11a/n/ac/ax
Transceiver:	2.4 GHz - 2x2 MIMO 5 GHz - 2x2 MIMO
Speed:	2.4GHz, 40 MHz Channel – 573 Mbps (PHY Rate) in AX Mode 5GHz, 80 MHz Channel – 1.201 Gbps (PHY Rate) in AX Mode

USB Interface

Type:	2xUSB 2.0 host ports

Power

AC Adapter:	Input: 110-240VAC, 50/60Hz Output: 12VDC, 1.5A
DC Connector:	2-PIN power adaptor input
Power (Max):	15W (Approx.)

Physical

Temperature:	Operating: 0 °C to 50 °C
Humidity (RH):	10% to 95% non-condensing
LED Indicators:	Power, PON, LOS, Internet, LAN1, LAN2, LAN3, LAN4, VoIP, WPS, 2.4G and 5G
Dimensions:	185mm (W) x 130mm (D) x 35mm (H)
Buttons:	Power ON/OFF, Reset, WLAN ON/OFF, WPS ON/OFF

Management

Local:	Web UI
Remote:	G.984.4/988 OMCI, Telnet and TR-069

Regulatory Compliances

Certification	CE (Conformité Européenne) compliant, FCC compliant, Laser safety standard IEC-60825 Class I.

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