1GE EPON ONU (BOSA)

4A FORA EP-1001S Rev.01HB

FORA®

Overview

EPON ONU is one of the EPON optical network unit design to meet the requirement of the broadband access network. It apply in FTTH/FTTO to provide the data and video service based on the EPON network.

EPON is the latest generations of access network technology. IEEE802.3ah is the standard protocol of EPON. The EPON standard differs from other PON standards in that it achieves higher bandwidth and higher efficiency using larger, variable-length packets. EPON offers efficient packaging of user traffic, with frame segmentation allowing higher quality of service (QOS) for delay-sensitive voice and video communications traffic. EPON networks provides the reliability and performance expected for business services and provides an attractive way to deliver residential services. EPON enables Fiber To The Home (FTTH) deployments economically resulting to accelerated growth worldwide.

Based on high-performance PON access chip. The chip supposes three mode：GPON/EPON/P2P, comply with the 802.3-2005, CTC EPON equipment technical requirements, have good PON interoperability compatibility, provide one GE auto-adapting Ethernet ports. The features high-performance forwarding capabilities to ensure excellent experience with Internet and HD video services. Therefore, the provides a perfect terminal solution and future-oriented service supporting capabilities for FTTH deployment. It has good third-party compatibility to work with the third party OLT, such as Huawei/ZTE/Fiberhome.

Features

- Full compatible with IEEE802.3ah;
- Support port-based rate limitation and bandwidth control;
- In compliant with IEEE802.3ah Standard;
- Up to 20KM transmission Distance;
- Support data encryption, group broadcasting, port Vlan separation, etc.
- Support Dynamic Bandwidth Allocation (DBA);
- Support ONU auto-discovery/Link detection/remote upgrade of software;
- Support VLAN division and user separation to avoid broadcast storm;
- Support power-off alarm function ,easy for link problem detection;
- Support broadcasting storm resistance function;
- Support port isolation between different ports;
- Support three layer routing functions;
- Support ACL and SNMP to configure data packet filter flexibly;
- Specialized design for system breakdown prevention to maintain stable system;
- Support software online upgrading;

Parameters	Specification
PON Port	- 1*EPON optical interface - Meet 1000BASE-PX20+ standard - Symmetric 1.25Gbps upstream/downstream - SC single-mode fiber - Split ratio: 1:64 - Transmission distance: up to 20KM - Receiving sensitivity: ≤-28dBm - Transmitting optical power: 0~+4dBm
Ethernet Port(LAN)	- 1*GE Auto-negotiation RJ45 ports - Full Duplex / Half-Duplex - RJ45, Auto-MDI/MDI-X - Transmission Distance 100 Meters
Power Supply Port	- 12V DC input
Network Management	- Support IEEE802.3 QAM, ONU can be remotely managed by OLT - Support Remote management through SNMP and - Telnet - Local management
Management Function	Status monitor, Configuration management, Alarm management, Log management
Shell	Plastic casing
Power	- External 12V 0.5A DC power supply adapter - Power consumption: <3W
Dimensions	120mm(L) x90mm(W) x25mm (H) 0.3kg
Environment	- Operating Temperature：0～50℃ - Storage Temperature：-40～85℃ - Operating Humidity：10%～90%(Non-condensing) - Storage Humidity：10%～90%(Non-condensing)

Application

✧ Solution：FTTH

✧ Business：Broadband Internet, IPTV, VOD, IP Camera