AN5261
Optical Network Unit
Datasheet

Overview

The AN5261 is a CBU ONU independently developed by FiberHome, supporting both GPON and XGS-PON upstream transmission. Used together with OLT equipment at a central office, it provides services such as Ethernet access and clock synchronization signal transmission for small-sized base station subscribers.

The AN5261 can be flexibly deployed. It can be placed on a plane, secured on a wall, or mounted in a cabinet to adapt to various scenarios.

Highlights

- Multiple mounting modes, easy installation, and flexible deployment
- Multiple time and clock synchronization modes; good adaptability to various network environments
- Type B and Type C protection switching with high reliability
- High-class lightning protection design for stable operation

AN5261

Classification	Item	Specification
Mechanical parameters	Dimensions (H × W × D)	44 mm × 440 mm × 225 mm
	Weight	2.4 kg
Power supply parameters	Voltage	-48 V DC
	Current	≤ 1 A
Power consumption parameters	Static power consumption	15 W
	Maximum power consumption	32 W
Environment parameters	Operating temperature	-30°C to 55°C
	Storage temperature	-40°C to 70°C
	Ambient humidity	5% to 95% (no condensation)
Lightning protection parameters		● Lightning protection for power supply and service ports, complaint with the EMC standard ITU-T K.21 ● Power supply: 6 kV in both common and differential modes ● GE ports: 4 kV in common mode; 0.5 kV in differential mode
Mounting modes		Plane mounting, wall mounting and cabinet mounting
Network side interfaces	Interface configuration	2 × GPON ports or 2 × XGS-PON ports
	Port type	SC/UPC ● GPON: SFP ● XGS-PON: SFP+
	Port rate	● GPON: 1.25 Gbit/s (upstream) / 2.5 Gbit/s (downstream) ● XGS-PON: 9.953 Gbit/s (both upstream and downsteam)
	Standard compliance	● GPON: ITU-T G.984 ● XGS-PON: ITU-T G.9807.1
	Interface functions	● Pluggable optical modules ● Type B and Type C protections
User side interfaces	Interface configuration	4 × GE ports, 2 × GE optical ports, 1 × 10GE optical port, 1 × 1PPS+TOD port
	Port type	● GE / 1PPS+TOD ports: RJ-45 ● GE optical ports: SFP ● 10GE optical port: SFP+
	Port rate	● GE ports: auto-negotiated to rates 10 / 100 / 1000 Mbit/s ● GE optical ports: 1 Gbit/s ● 10GE optical ports: 10 Gbit/s
	Standard compliance	IEEE 802.3
	Interface functions	● Configuration of Ethernet port rate, working mode, port enabling, and auto-negotiation mode ● Loop detection on Ethernet ports ● In-band IEEE 1588v2 functions and synchronous Ethernet ● BITS and 1PPS+TOD clock synchronization signals

Functions and Features

Multicast

- IGMP v2/v3
- IGMP Snooping
- MLD

Clock Synchronization

- In-band IEEE 1588v2 functions
- Synchronous Ethernet
- BITS and 1PPS+TOD clock synchronization

QoS and ACL

- ACL: traffic matching based on ACL rules
- QoS: service flow priority queues and scheduling of them
- Traffic rate control and priority remarking based on traffic classification rules
- Rate control on Ethernet ports
- Flow control based on PAUSE frames
- Traffic management based on DBA and priority to meet subscribers' demand for minimum designated bandwidth and low latency for high-priority services

Layer 2 Management

- Line identifiers
- MAC address management
- Transparent transmission of BPDUs
- IEEE 802.1p and 802.1Q
- VLAN stacking
- Transparent transmission and 1:1 translation of VLAN tags
- Multicast packets carrying VLAN tags
- Adding / stripping of VLAN tags based on Ethernet ports

Security

- Limit on number of MAC addresses per port
- Broadcast storm suppression on user ports and uplink ports
- Protection against various network attacks (including ARP attack, ICMP attack, DOS attack, and BPDU attack)
- MAC / IP address filtering

OAM

- Equipment management via a Web-based network management system: Allows login to the equipment via a user LAN port to view equipment information and modify settings such as the ONU's logical SN and password.
- Remote management in Telnet mode: Displays ONU status and prints debugging information.
- OMCI protocol
- DHCP line identifiers
- PPPoE+