

EOC All-In-One Home Gateway



Product Overview

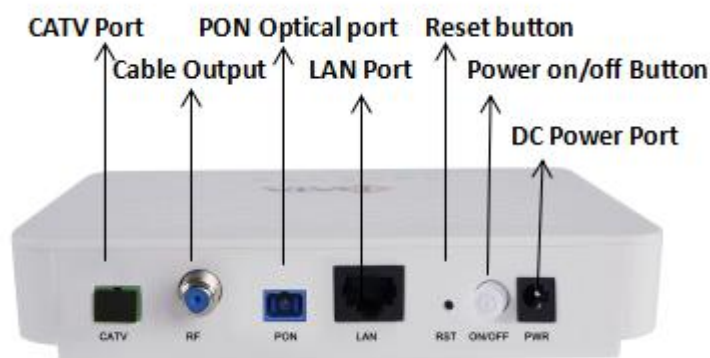
This Product is based on the mature, stable, high cost performance EPON technology and HomePlug AV coaxial Ethernet access technology, gigabit Ethernet switching and HFC technology, with high reliability and good quality of service (QoS) guarantee etc. This Product meets the HomePlug AV, IEEE1901 (Draft), IEEE802.3ah technology standard requirements and has good compatibility with third party manufacturers OLT.

This product is the EOC all-in-one home gateway based on HomePlug AV solution for Ethernet access over coax. It works together with EOC slave which is based on HomePlug AV solution as well to construct a two-layer Ethernet data transmission channel on CATV coax cable, provide the Ethernet access service based on the existing coax cable networking. This product is based on the Mstar chipset solution, with high anti jamming capability OFDM technology. The 7.5-65MHz low frequency band is used for EOC signals. Built in high isolation filter as CATV RF and EOC signal mixer, the EOC signal and CATV signal in 47~1000MHz can run on one cable without interference. The PHY Layer speed is 500Mbps. Using this product can achieve multi terminal within the family Interconnected, in different rooms through the Wi-Fi EOC terminal can realize the whole house Wi-Fi signal coverage, without worrying about the Wi-Fi signal intensity problem, simple and convenient and practical.

Function Features

- 7.5-65Mhz frequency for EOC signals, no influence on CATV Service
- Based on HomePlug AV solution and Mstar chipset
- Support data encryption
- Support broadcast storm limitation
- Support data packet statistics
- Automatically get configurations from EOC Master when Newly connected with powered on
- Support ONU software online upgrade
- Support the optical power monitor
- Flexible bandwidth allocation function
- Support various QOS service level
- Provide a rich fault alarm function, easy to fault diagnosis
- ONU module support interconnection with the third-party OLT

Product interface




Specification

Item	Parameter
PON Interface	1 EPON optical interface Meet 1000BASE-PX20+ standard Symmetric 1.25Gbps upstream/downstream SC/UPC single-mode fiber split ratio: 1:64 Transmission distance 20KM
CATV Interface	1 HFC Optical input, SC/APC
LAN Interface	4*10/100M or 4*10/100/1000M auto-negotiation Full/half duplex mode RJ45 connector Auto MDI/MDI-X 100m distance
RF Interface	1 mix (data+CATV)output Female F-Type Connector Frequency:7.5-65MHz Output level:115±5dBuv Receive sensibility:65dBuv PHY Layer:500Mbps EOC Standard: IEEE P1901(Draft), HomePlug AV
Power Interface	12V DC Power supply
PON Optical Parameter	Wavelength: Tx 1310nm, Rx1490nm Tx Optical Power: 0~4dBm Rx Sensitivity: -27dBm Saturation Optical Power: -3dBm
Data Transmission Parameter	PON Throughput: Downstream 980Mbps; Upstream 950Mbps Ethernet: 1000Mbps Packet Loss Ratio: <1*10E-12 latency: <1.5ms
Business Capability	Layer 2 wire speed switching Support VLAN TAG/UNTAG, VLAN translation Support Port-based speed limitation Support Priority classification Support storm control of broadcast Support loop detection
Shell	Plastic casing
Power	Power supply: 12V DC/1A Power consumption: <6W
Physical Specifications	Item Dimension: 78mm(L)*78mm(W)*25mm(H) Item weight: 0.1kg

Environmental Specifications	Operating temperature: 0 to 50°C Storage temperature: -40 to 85°C Operating humidity: 10% to 90%(Non-condensing) Storage humidity: 10% to 90%(Non-condensing)
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CAT V

Item	Parameter
Wavelength	1550nm
Optical return loss	>45dB
Input optical power	-18dBm~0dBm
RF frequency	47MHz~1000MHz
RF output lever	78dBuV (@-12~-2dBm@85MHz)
CNR	>41dB (@-10dBm@DS22 Channel)
CSO	>60dBc (@-10dBm@DS22 Channel)
CTB	>60dBc (@-10dBm@DS22 Channel)
RF output return loss	>12dB
RF impedance	75Ω
AGC function	Support

Network Application

- ✧ CATV
- ✧ Internet Access

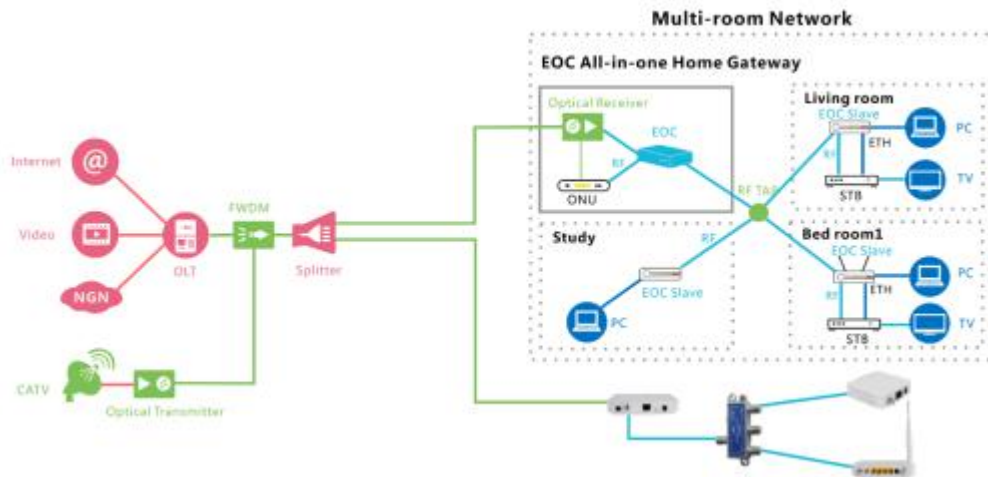


Figure 1 Application Illustration