SFU & HGU GPON ONT, 1GE+CATV

FWG-ONT810GC, SFU & HGU GPON ONT, 1GE+CATV, Product introduction

FWG-ONT810GC is compatible with Huawei EA5800 series including models of EA5800-X17/X15/X7/X2, providing users with a unified bearer platform for multiple services such as broadband and CATV. It provides GPON, XG-PON, XGS-PON access, FTTH/FTTR and multiple network modes, realizing one optical fiber network covering all services. Through the FULLWELL company's patented technology, it achieves GPON + CATV network, simplifies the network architecture and reduces OPEX.

FWG-ONT810GC is a residential gateway device with routing functions for XPON ONU and LAN Switch for residential and SOHO users, which is in line with ITU-T G.984 and IEEE802.3ah.The uplink of FWG-ONT810GC provides one PON interface, while downlink provides one Ethernet and RF interface. It can realize optical access solutions such as FTTH (Fiber To The Home) and FTTB (Fiber To The Building). It fully integrates the reliability, maintainability and security design of carrier-grade equipment, and provides customers with the last kilometer of broadband access to residential and corporate customers.

Features:

◆Compliance with IEEE 802.3ah(EPON) & ITU-T G.984.x(GPON) standard
◆Support IPV4 & IPV6 Management and Transmission
◆Support TR-069 remote configuration and maintenance
◆Support VEIP MODE
◆Support SFU,HGU ,or SFU & HGU
◆Support Layer 3 gateway with hardware NAT
◆Support Multiple WAN with Route/Bridge mode
◆Support Layer 2 802.1Q VLAN, 802.1P QoS,ACL etc
◆Support IGMP V2 and MLD proxy/ snooping
◆Support DDNS, ALG, DMZ, Firewall andUPNP service
◆Support CATV interface for video service
◆Support bi-directional FEC

Highlights:-

◆Support docking compatibility with OLT of various manufacturers
◆Support automatically adapt to the EPON or GPON mode used by the peer OLT
◆Support SFU&HGU dual mode
◆Support multiple wan configuration
◆Support WAN PPPoE/DHCP/Static IP/Bridge mode.
◆Support CATV video service
◆Support fast transmission of hardware NAT

Hardware Specifications:

◆interface: 1* GPON+1*GE+1*RF
◆Power adapter input: 100V-240V AC, 50Hz-60Hz
◆Power Supply: DC 12V/0.5A
◆Indicator light: PWR/PON/LOS/LAN//RF
◆Button: Reset Button
◆Power Consumption: <6W
◆Working temperature: -20℃～+55℃
◆Environment humidity: 5% ~ 95% (non-condensing)
◆Dimension：88mm x 88mm x 28m(L×W×H)
◆Net Weight：0.11Kg

PON Interface:

◆Interface Type: SC/APC, CLASS B+
◆Transmission distance: 0～20km
◆Working wavelength: Up 1310nm；Down 1490nm；CATV 1550nm
◆RX Optical power sensitivity: -27dBm
◆Transmission rate: GPON: Up 1.244Gbps；Down 2.488Gbps .EPON: Up 1.244Gbps；Down 1.244Gbps

CATV Interface:

◆Interface type: 1*RF
◆Optical receiving wavelength: 1550nm
◆RF output level : 82±1dBuV
◆Input optical power: +2~-18dBm
◆AGC range: 0~-12dBm
◆Optical reflection loss： >45
◆MER: >31@-15dBm

Ethernet Interface :

◆Interface type：1* RJ45
◆Interface parameters：10/100/1000BASE-T

Company Introduction:

Hangzhou Fullwell Optoelectronic Equipment Co., Ltd. was established in 2005 and is suited in Qimeng Science & Innovation Park, Liangzhu Street, Yuhang District, Hangzhou City. The company is committed to the R&D, manufacturing and sales of FTTH CATV RF video overlay optoelectronic products. We have gained 9 software copyrights certified by the National Copyright Administration and 16 utility model patents issued by the National Intellectual Property Office. Furthermore, we have won the title of Zhejiang Province Small and Medium-sized Technology Company. Fullwell has been recognized as the Yuhang District Science and Technology Enterprise R&D Center by Hangzhou Yuhang District Science and Technology Bureau.

FULLWELL products enable the realization of CATV RF video overlay. At the Huawei China Partner Conference 2024, Fullwell and Huawei jointly provided the soliton for CATV+F5G, which attracted the attention of many participants. Achieving the transmission over 1 fiber with three wavelengths or five wavelengths, which greatly reduces the costs of ODN network splitters, engineering cabling, and manual welding from smart headend to the user end or desktop.

Hangzhou Fullwell continues to increase the investment of the R&D, enhance the innovation ability of the company's own brand products, the technical content of high-tech products, and the market competitiveness of R&D core products. Our products are mainly exported to Europe, South America and other countries and regions, and serving for global partners and other internationally renowned telecommunications and television operating network companies (ISP). In order to keep up with the home and aboard markets, as well as the needs of optical communication equipment from new and existing customers, our company has designed, developed and manufactured the "FULLWELL" brand series products in recent years, and also provided OEM and ODM to professional operators and distributors.

We lead the market, because we are professional! We will continue to develop and sell premium quality products, and provide customers with optimized solutions and second to none service. FULLWELL is a partner you can always be relied on.

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XGS-PON and RF Video Overlay (CATV) in FTTH Network Solutions

CATV

CATV RF

1550nm Optical CATV Transmitter
FWT-1550DT-10

HUAWEI
Enterprise Partner
Solution
CERTIFIED
NO.20210111CN0370

Internet

HUAWEI OLT XGS-PON EA5800-X7

1550nm CATV

1310/1490nm & 1270/1577nm

FWAP-XGS Series XGS-PON & CATV WDM EDFA / Combiner

Mixed Output: 1310/1490nm & 1270/1577nm + 1550nm

FTTH
The utilization of three or five wavelengths by using just one optical fiber.

Splitter

FWAP-XGS series XGS-PON & CATV WDM EDFA / Combiner can also be integrated into point-to-multipoint such as GPON, 10GPON, XGPON, XGSPON, NGPON2, GEPON, Ethernet PtP & Wavelength multiplexing of RF Video Overlay (CATV) in FTTH xPON networks solutions.

Solution 1

Solution 2

Solution 3

SFU & HGU GPON ONT

XGS-PON & CATV WDM Optical Receiver + XGS-PON ONU

XGS-PON Filter Optical CATV Receiver 1550nm CATV Signal

FWG-ONT810GC
SFU & HGU GPON ONT, 1GE+CATV

FWR-XGS-8610RW

FWR-XGS-1000W
Passive WDM
Optical Receiver

FWR-XGS-1000GSD

HUAWEI ONU

FWR-XGS-1000
Passive Filter
Optical Receiver