# GEPON ONU FD101HC/FD111HC DATA SHEET

#### **Product Overview**

GEPON ONU FD101HC/FD111HC is designed mainly for FTTH use and FTTO use as well. GEPON ONU FD101HC/FD111HC support 1000Base-PX10/PX20 standard with 1:64/1:32 maximum optical splitting ratio and 10/20km distance, and provide 1uplink GE PON port.

ONU FD101HC/FD111HC together with OLT could realize flexible network structure and maintenance and provide total FTTxsolutions.

ONU FD104H adopts single fiber WDM technology with downlink wavelength 1490nm and uplink wavelength 1310nm .It only needs one-core fiber to transmit data service.

ONU FD101HC has 1 PON port and one 10/100BASE-T ports. ONU FD111HC has 1 PON port and one 10/100/1000BASE-T ports



EPON ONU-FD101HC/FD111HC

#### **Function Features**

- 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 ,RSTP, 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 ACL and SNMP to configure data packet filter flexibly
- Specialized design for system breakdown prevention to maintain stable system
- Support software online upgrading EMS network management based on
- SNMP ,convenient for maintenance

## Specification

| Item                       | Parameters                 | Specifications   |  |  |
|----------------------------|----------------------------|--|--|--|
| Interface                  | PON Interface              | 1 GEPON optical interface  Meet 1000BASE-PX20 standard  Symmetric 1.25Gbps upstream/downstream  SC single-mode fiber  split ratio: 1:64  Transmission distance 20KM @ split ratio<1:32 |  |  |
|                            | User Ethernet<br>Interface | 1*10/100Mauto-negotiation (FD101HC)  1*10/100/1000Mauto-negotiation (FD111HC)  Full/half duplex mode  RJ45 connector  Auto MDI/MDI-X  100m distance                                    |  |  |
|                            | Power Interface            | 12V DC Power supply  An external 12V 0.5A AC/DC power supply adapter   |  |  |
| Performance<br>&Parameters | PON Optical Parameter      | Wavelength: Tx 1310nm, Rx1490nm  Tx Optical Power: -1~4dBm  Rx Sensitivity: -24dBm  Saturation Optical Power: -3dBm  Connector Type: SC  |  |  |

# EPON ONU FD101HC/FD111HC

| Item               | Parameters                   | Specifications   |
|--------------------|------------------------------|--|
|                    |                              | Optical Fiber: 9/125ym single-mode fiber   |
|                    | Business Capability          | Layer 2 wire speed switching Support VLAN TAG/UNTAG, VLAN conversion Support Port-based speed limitation Support Priority classification Support storm control of broadcast Support RSTP |
| Network Management | Management Mode              | Support IEEE802.3 QAM, ONU can be remotely managed by OLT Support Remote management through SNMP and Telnet Local management   |
|                    | Managemen<br>t Function      | Status monitor, Configuration management, Alarm management, Log management   |
| Indicator          | LED Indicator                | PWR: Power up or down OPTIN: Optical Link Status LINK: ONU Registered LAN: Link Status of Ethernet Interface   |
| Physical Features  | Shell                        | Plastic casing   |
|                    | Power                        | External 12V 0.5A AC/DC power supply adapter  Power consumption: < 3.8W  |
|                    | Physical Specifications      | Item Dimension: 160mm(L) x 120mm(W) x 30mm (H)  Item weight: 0.2kg   |
|                    | Environmental Specifications | Operating temperature: 0 to 50 °C  Storage temperature: -40 to 85 °C   |

### **EPON ONU FD101HC/FD111HC**

| Item | Parameters | Specifications                                  |
|------|------------|---|
|      |            | Operating humidity: 10% to 90% (Non-condensing) |
|      |            | Storage humidity: 5% to 95% (Non-condensing)    |

## **Typical Application**

Typical Solution: FTTH\ FTTB\ PON+EOC

• Typical Business: INTERNET、IPTV、VOD、IP Camera

#### **Network Construction**

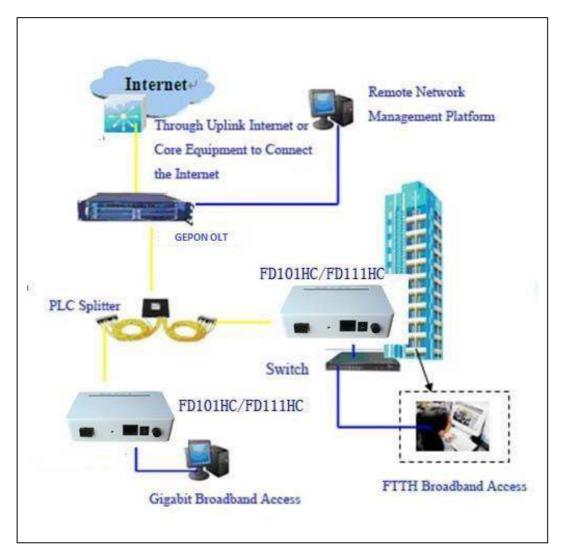


Figure 1: FD101HC/FD111YC Application Diagram