

**Specification****HTZ2045X**

1GE+CATV

## 1 OVERVIEW

- HTZ2045X series single-user ONU is designed for ONU in different FTTH solutions. The carrier-class FTTH application provides data service access.
- HTZ2045X series adopts high-performance and low-consumption chips, and supports CTC V2.0 interconnection and interworking standard of China Telecom. With the help of NGBN View NMS, it can provide subscribers with abundant services, and totally meet the needs of carrier-class FTTH devices.
- HTZ2045X series is designed by ZTE chipset.

## 2 FUNCTIONAL FEATURE

- Router mode supports PPPoE / DHCP / static IP
- Support port-based rate limitation and bandwidth control
- In compliant with ITU-T G.984 Standard
- Up to 20KM transmission Distance
- Support data encryption, group broadcasting, port VLAN separation, etc.
- Support Dynamic Bandwidth Allocation (DBA)
- Support IPv4 & IPv6
- Support CATV interface for Video Service and remote control by Major OLT
- 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
- Specialized design for system breakdown prevention to maintain stable system
- Support software online upgrading EMS network management based on SNMP, convenient for maintenance

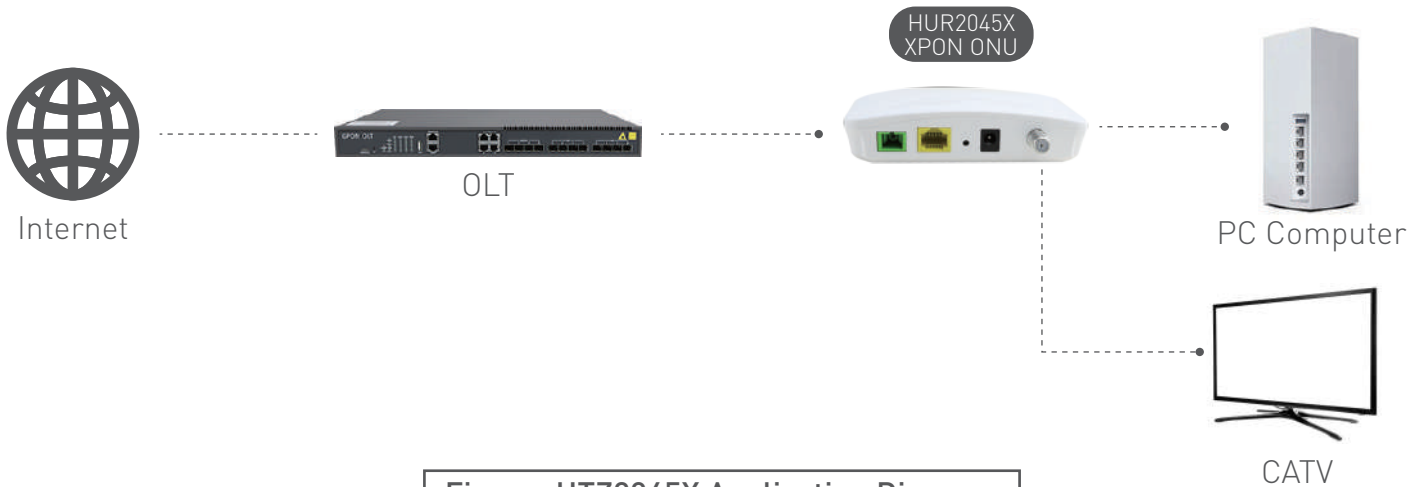
# 3 HARDWARE SPECIFICATION

Item		Parameter
Interface	PON Interface	1 XPON optical interface Meet Class B+ standard Upstream 1.244Gbps, downstream 2.488Gbps SC-APC single-mode fiber split ratio:1:128 Transmission distance 20KM
	User Ethernet Interface	1*10/100/1000M auto-negotiation Full/half duplex mode RJ45 connector 100m distance
	Power Interface	12V DC Power supply
CATV	Optical Parameter	RF, WDM, optical power : +2~-15dBm Optical reflection loss: $\geq 45$ dB Optical receiving wavelength: $1550 \pm 10$ nm AGC range: -13~+1dBm
	RF Parameter	RF frequency range: 47~1000MHz RF output impedance: 75 $\Omega$ RF output level: 78dBuV MER: $\geq 32$ dB@-15dBm
Performance Parameters	PON Optical Parameter	Wavelength: Tx 1310nm, Rx1490nm Tx Optical Power:0.5~+5dBm Rx Sensitivity: -27dBm Saturation Optical Power: -8dBm Connector Type: SC/APC Optical Fiber: 9/125 $\mu$ m single-mode fiber
	Data Transmission Parameter	Packet Loss Ratio: $< 1 * 10^{-12}$ latency: <1.5ms
	Gateway	Router mode supports PPPoE / DHCP/ static IP WAN support Router and Bridge mode WAN support Internet LAN supports DHCP and static IP Support NAT and NAPT
	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

Item		Parameter
Network Management	Management Mode	Support ITU-T G.984 OMCI, ONU can be remotely managed by OLT Support Remote management through Telnet or http Local management
	Management Function	Status monitor, Configuration management, Alarm management, Log management
Indicator	LED Indicator	PWR: Power up or down LOS: Optical Link Status PON: ONU Registered LINK/ACT: Link Status of Ethernet Interface
Physical Features	Shell	Plastic casing
	Power	External 12V 0.5A AC/DC power supply adapter Power consumption: <2W(FD101HC), <2.3W(FD111HC)
	Physical Specifications	Item Dimension: 120mm(L) x 78mm(W) x 30mm (H) Item weight: 0.05kg
	Environmental Specifications	Operating temperature: -20 to 70 °C Storage temperature: -40 to 85 °C Operating humidity: 10% to 90% (Non-condensing) Storage humidity: 10% to 90% (Non-condensing)

## APPLICATION

- Typical Solution: FTTH、FTTB、PON+EOC、CATV
- Typical Business: INTERNET、IP Camera



**Figure: HTZ2045X Application Diagram**