

ONU730-TV

XPON ONT

CATV 1GE 3FE 1TEL + 2.4g WiFi



1. Overview

ONU730 is the terminal equipment of a series of XPON which complies fully with ITU-G.984.1/2/3/4 standard and meet the energy-saving of G.987.3 protocol. It is based on mature and stable and high cost-effective XPON technology which adopts high-performance XPON Realtek chipset and has high reliability, easy management, flexible configuration, robustness, good quality service guarantee(Qos). ONU730 adopts MTK MT7603EN scheme for WIFI application that supports IEEE802.11b/g/n standard. It also provides the WEB management page and simplifies the configuration of WIFI.

ONU730 supports 1 RF port for CATV, which can be switched off on OLT terminal. ONU730 has the automatic function of EPON and GPON, which is realized by the Pure software.

Auto-negotiation(When the onu works, it will automatically identify EPON and GPON mode according to the access optical signal, otherwise it automatically defaults to GPON mode.

2. Functional Feature

EPON Mode

- Comply fully with IEEE802.3ah standard and CTC EPON device technology requirement
- Support bidirectional FEC
- Support downlink triple churning
- Support AES128 decryption function
- ONU discovery and registration process implemented by Pure hardware
- Support the report of the CTC requirement
- Support Dying-Gasp check and report
- Support OAM remote management
- Support VLAN function
- Operation mode:SFU or HGU option
- Support TR069,NAT,DMZ,DNS features
- Support Bridge,PPPoE,DHCP and Static IP configuration for WAN interface
- Support IP,MAC Filtering,Firewall Functionality in routed mode
- Good interworking with the OLT from different manufacturers,such as Broadcom,ZTE,HUAWEI, etc.

GPON Mode

- Comply fully with ITU-G.984.1/2/3/4 standard and G.987.3 protocol
- Support bidirectional FEC and RS(255,239) FEC CODEC
- Support 16+1 TCONT and 32+1 GEMPORT
- Support AES128 decryption function of G.984 standard
- Support SBA and DBA dynamically broadband allocation
- Support the PLOAM function of G.984 standard
- Support Dying-Gasp check and report
- Support synchronous Ethernet
 - Support the rogue ONU alarm function
- Support multiple VLAN function
- Operation mode:SFU or HGU option
- Support TR069,NAT,DMZ,DNS features
- Support Bridge,PPPoE,DHCP and Static IP configuration for WAN interface
- Support IP,MAC Filtering,Firewall Functionality in routed mode
- Good interworking with the OLT from different manufacturers,such as HUAWEI,ZTE,Broadcom,etc.

3. Hardware Specification

Tech parameters		Description
Up-link interface	EPON Mode	1 EPON interface, SC single mode single fiber
		1 Gbits/s rate which uplink and downlink are symmetrical
		Fiber type: SC/PC
		TX Optical power: -1 ± 4 dBm
		RX Sensitivity: -26 dBm
	GPON Mode	safety: ONU authentication mechanism
		1 GPON interface, SC single mode single fiber
		RX 2.488 Gbits/s rate and TX 1.244 Gbits/s rate
		Fiber type: SC/APC
		TX Optical power: 0~4 dBm
	RX Sensitivity: -28 dBm	
	safety: ONU authentication mechanism	
Wavelength(nm)	TX 1310nm, RX 1490nm	
Fiber connector	SC/APC	
Down-link data interface	3*10/100Mbps and 1*10/100/1000M auto-negotiation Ethernet interface, RJ45 interface	
Indicator LED	11 pcs, refer to NO.6 definition of indicator LED	
DC supply interface	input+12V 1.5A, footprint: DC0005 \varnothing 2.1MM	
Power	≤ 12 W	
Operating temperature	-5~+55°C	
Humidity	10~85% (non-condensation)	
Storage temperature	-30~+70°C	
Dimension (MM)	230x130 x 34mm (mainframe)	
Weight	0.5Kg (mainframe)	

4. ONU WiFi Features

WiFi Characteristics	
WIFI	2.4G
Standard	IEEE802.11b/g/n
Frequency	2.4~2.4835GHz
Transmission speed	IEEE 802.11b :max11Mbps IEEE 802.11g: max54Mbps IEEE 802.11n:max 300Mbps
Data Modulation	DSSS,BPSK,CCK QPSK, and 16-QAM/64-QAM
Multiple encryption methods	WFA,WPA,WPA2,WAPI
Antenna	2T2R Mode, external antennas 5DBI Gain per pcs MIMO: 2*2
WPS function	Support

5. ONU CATV Features

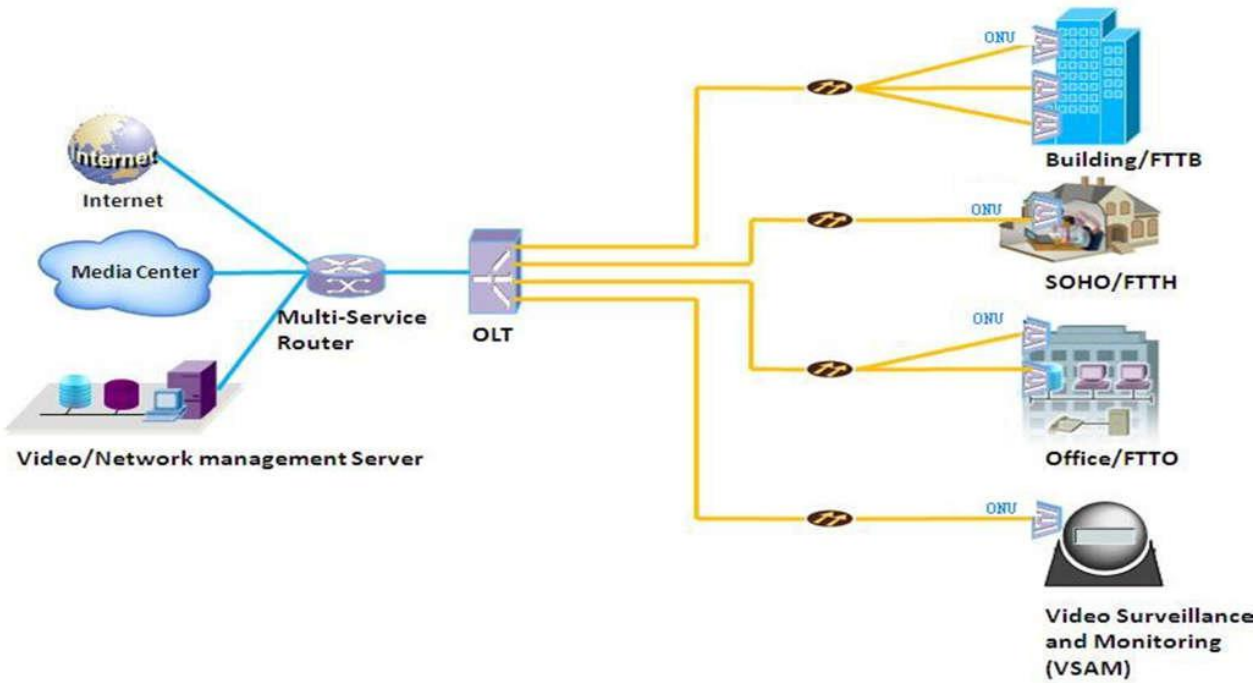
Tech features	Description
Optical wavelength	1540-1560nm (Single fiber, internal PWDW component)
Optical input range	0~ -15dBm
Optical return loss	≥45DB
Bandwidth	40MHz-1000MHz
Flatness	±1.5DB
RF output level	The default:75±5dBuV@155MHZ
AGC control	Regulation accuracy: ±1DB
RF Output return loss	≥14DB
RF output impedance	75Ω
MER	> 33 DB @251MHZ
CNR	≥43 DB
CTB	≥54 DB
CSO	≥54DB

6. ONU Telephone Features

- 1.Support SIP voice protocol.
2. Support H.248 voice protocol.
- 3.Port ringing current voltage: 50±10VAC
- 4.Port type: RJ11
- 5.Support T38 and fax.
- 6.Support G.711A-law/u-law,G729,G722 coding/decoder technology.

7. Application

- Typical Solution: FTTH(Fiber To The Home)
- Typical Business: INTERNET、IPTV、WIFI、VOIP etc



ONU730 Application Diagram