

## GONU278 GPON+ 12.5Gpbs/1.25Gbps ONU

GONU278 is a GPON+ ONU having one optical fiber port with 2 IP Down-streams and one Upstream, 2\*T1 RF ports, 1\*2.5G and 1\*GE at RJ-45 ports, 1 POTS, 1USB and AX3000 WiFi. GONU278 can meet the requirement of the broadband 4K IPTV access network. It applies in FTTH/FTTO to provide data and video service based on GPON network.

Besides regular GPON ONU's 2.5Gpbs from 1490nm OLT down-streaming signal, GONU278 has another 10Gbps down-streaming data from 1550nm signal while keep the 1.25Gbps up-streaming data on 1310nm, where 1550nm wavelength broadcasts SD/HD/4K/8K IPTV MPTS signals and SD/HD/4K IPTV SPTS signals are still carried at 1490nm wavelength. All IPTV MPTS/SPTS signals are available at GONU278 each GE port and WiFi. GONU278 has the capacity of more IPTV MPTS contents, faster IPTV SPTS, OTT and web browsing. The built-in MTK chips enable GONU278 to have powerful IPTV, Internet and WiFi functions.

GONU278 has two T1 RF ports. With built-in high performance 1000Base-T1 and 100Base-T1 Ethernet PHY transceiver, this RF port provides bidirectional gigabit access over up to 100 meter RG6 coaxial cable, which enable FTTH to the main home entrance and gigabit Ethernet over coax cable to the room (CTTR). GONU278 is helpful for full WiFi coverage in the rooms.

GONU278 has good third-party GPON OLT compatibility.



### Features:

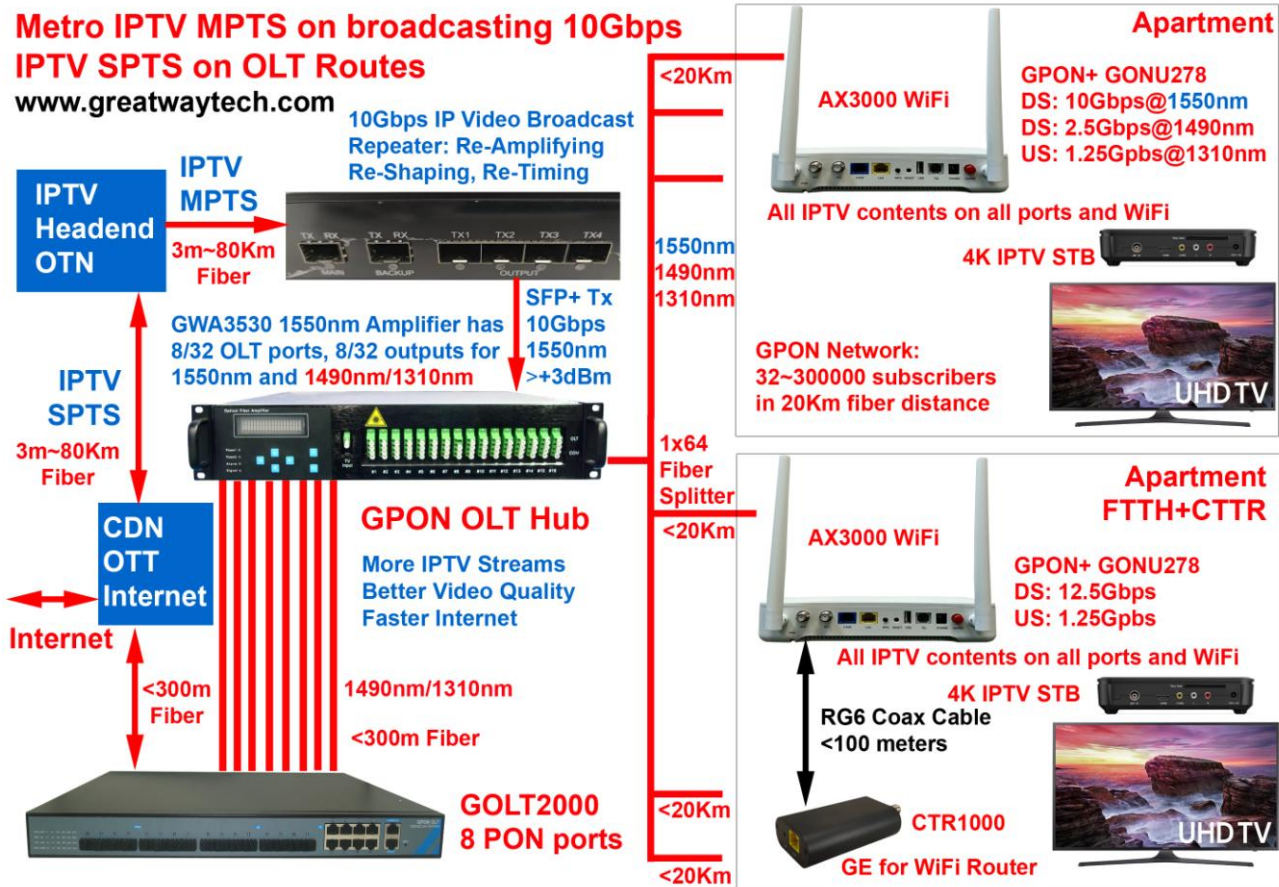
- Main chip Vendor: MTK
- Suitable for home broadband, e-government and enterprise access with integrated access demands of broadband/voice/ data/video etc.
- Complete pure data, double play and triple play FTTH services.
- Smart connection by multiple kinds of UNIs: GE, FE, Wi-Fi.
- Support user-friendly GUI with plug-in and play capability instead of field configuration.
- Management and maintenance with port based mode configuration and status query.

- Carrier-level reliability in hardware/software and other system design to fully guarantee the normal operation of equipment
- Support 2K MAC address table
- 1\*2.5G and 1\*GE RJ-45 ports
- AX3000 WiFi
- 1\*POTS Optional
- 2\*T1 Optional

Applications:

**Metro IPTV MPTS on broadcasting 10Gbps  
IPTV SPTS on OLT Routes**

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Specification

Interface	
PON	ITU-T G.984.2, ITU-T G.984.3 and ITU-T G.984.4, Class B+ Downstream: 2.5Gbps@1490nm, Upstream: 1.25Gbps@1310nm 20Km Fiber Distance Receiving sensitivity: <-28dBm Transmitting Power: +0.5~+5dBm Fiber Connector: SC/APC
IP Video Broadcasting	Input Optical Power: > -20dBm@1550nm Support 10Gbps SFI/XFI Maximum IPTV Data rate: 10Gbps

Ethernet	1*10/100/1000BASE-T@RJ-45 1*100/1000/2500BASE-T@RJ-45 Cable distance 100 meter
WLAN	802.11a/n/ac/ax 5GHz & 802.11g/b/n/ax 2.4GHz 3*3 5.8GHz: 2402Mbps 2*2 2.4GHz: 574Mbps 2*2.4GHz&5.8GHz 5dBi external antennas 1*5.8 GHz 3dBi inner antenna
T1 RF Port GE over coax cable Transceiver	2*75Ohm F Female Ports Standard: IEEE802.3bq 1000Base-T1 Output RF Level: 49±0.5dBμV/8MHz@450MHz Minimum Receiving RF Level: 40±0.5dBμV/8MHz@450MHz Return Loss: 16dB@88~650MHz Max RG6 Cable Distance 100 Meter
POTS	One RJ-11 FXS port for connecting to analog telephones Support SIP and IMS SIP Support G.711a/G.711u/G.722/G.729 codec Support echo cancellation, VAD/CNG,DTMF Relay Support T.30/T.38 fax Support caller identification/call waiting/call forwarding/call, forwarding/call holding/third-party meetings Support link testing based on GR-909
USB	USB2.0
<b>Software Features</b>	
WAN Type	Dynamic IP/Static IP/PPPoE
DHCP	Server, Client, DHCP Client List, Address Reservation
Quality of Service	WMM, Bandwidth Control
Port Forwarding	Virtual Server, Port Triggering, UPnP, DMZ
VLAN	802.1Q tag VLAN, VLAN transparent mode/VLAN translation mode/VLAN trunk mode
Access Control	Parental Control, Local Management Control, Host List, Access Schedule, Rule Management
Firewall Security	DoS, SPI Firewall IP Address Filter/MAC Address Filter/Domain Filter IP and MAC Address Binding
Management	Access Control Local Management Remote Management
Internet Protocol	IPv4, IPv6
Wireless Security	WPA-PSK, WPA2-PSK,WPA-PSK/WPA2-PSK mixing mode,

	WPA3-SAE,WPA3-SAE Transition mode AES encryption authentication
<b>Layer 2 Performance</b>	
MAC	Support 2K MAC Address
VLAN	Support 802.1Q VLAN Support 4094 VLAN Support QinQ
QOS	Support DBA Control Support live streaming with strict bandwidth guarantees
<b>Layer 3 Performance</b>	
Management	Support bridging mode Support routing mode Support WEB, TR069, Telnet management Support FTP remote upgrade Support dual mirror backup Support WiFi AC function to achieve whole house roaming
<b>Environment</b>	
Power Supply	DC12V 2A Adapter, CE or UL certified
Power via Coax	12V DC over max 100 meter RG6 Cable to power remote CTR1000
Power Consumption	<12W
Dimension (L×W×H)	183mm*135mm*39.5mm
Operation	0°C~45°C,10%-90% non-condensing
Storage	-40°C~85°C,5%-90% non-condensing

LED Indicator			Description
1	LAN	LAN port status	On: Ethernet connection is normal; Blinking: Data is being transmitted through the Ethernet port; Off: Ethernet connection is not set up;
2	LOS	GPON optical signals	On: Optical power lower than receiver sensitivity ; Off: Optical in normal
3	PON	ONU Register	On: Success to register to OLT; Blinking: In process of registering to OLT; Off: In process of registering to OLT;
4	T1	T1 Status	On: T1 is connected at the RF port Off: no T1 connection at the RF port
5	PWR	Power status	On: The ONU is power on; Off: The ONU is Power off;

### Ordering Information

**GPON+ ONU (2.5Gpbs+10Gpbs DS and 1.244Gpbs US) with following options:**

GONU278 (2\*T1+1\*2.5G+1\*GE, 1\*POTS, 1\*USB, AX3000 WiFi, 12V DC adapter)

GONU276 (1\*2.5G+1\*GE, 1\*POTS, 1\*USB, AX3000 WiFi, 12V DC adapter)

GONU272 (1\*2.5G+1\*GE, 1\*USB, AX3000 WiFi, 12V DC adapter)

