



# GPON/ONU with 4x Gigabit Ethernet / 1x POTS Interfaces / Wireless AX1800

## PGN6403V

To deliver triple-play services to the subscriber in Fiber-to-the-Home or Fiber-to-the-Premises application, the PGN6403V ONU incorporates interoperability, key customers' specific requirements and cost-efficiency.

GPON technology has been adopted to provide UWB access for Family/Enterprise's User. Equipped with ITU-T G.984 compliant 2.5G Downstream and 1.25G Upstream GPON interface, the GPON ONU supports the full of services including voice ,video, and high speed internet access.

Compliant with standard OMCI definition, PGN6403V ONU is manageable at remote side and supports the full range FCAPS functions including supervision, monitoring and maintenance.



## Service

### Data

The PGN6403V ONU is delivered with 4\*10/100/1000 Base-T interface, supporting:

- Auto-negotiation and MDI/MDIX auto-sensing
- Built-in layer-2 switch
- Advanced data features such as VLAN tag manipulation, classification, and filtering
- Built-in layer-3 routing and residential gateway
- 2.4GHz 600Mbps + 5GHz 1200Mbps WLAN Interface

### Video

The PGN6403V ONU supports video contents delivered in the form of data (by multicast or unicast).

### Voice

The PGN6403V ONU can optionally be delivered with 1\* POTS interface port for carrier-grade voice services, supporting:

- Multiple voice codec
- Echo Cancelling, VAD, CNG
- Supporting static or dynamic jitter buffer
- Various CLASS services - Caller ID, Call Waiting, Call Forwarding, Call Transfer, etc.SIP (RFC3261)
- MEGACO v2 (H.248)

To enable VoIP access, the PGN6403V ONU also supports interfacing external IAD box or Home Router with voice capability through the Ethernet Interface.

## Specifications

Optical SPEC	Working wavelength	nm	PON:TX1310, RX1490;
	The light emitting power	dBm	1.5 ~ +4(GPON)
	The light receiving sensitivity	dBm	(-) 28dBm
	Optical fiber connector	/	PON:SC/UPC
Port	The user side Ethernet ports	/	4*GE
	USB (2.0)	/	-
	POTS	/	1
WiFi	2.4G WiFi	/	up to 600Mbps
	5G WiFi	/	up to 1200Mbps
Other	The power supply	V/A	DC12V, 1.5A
	Operating temperature	°C	-5°C ~ 45°C

## Specifications

### WiFi

- 2.4GHz 600Mbps + 5GHz 1200Mbps
- 802.11 g/n/ax
- External 5dBi Antenna

### GPON Interface

- Compliant with ITU-T G.984 GPON standards
- BoSA on board optical solution
- 1.244 Gbps Burst Mode Upstream Transmitter
- 2.488 Gbps Downstream Receiver
- Compliant with ITU-T G.984.2 Amd1, Class B+
- Wavelengths: US 1310nm, DS 1490nm
- Multiple T-CONTs per device
- Multiple GEM Ports per device

### Ethernet Interface

- 4\*GE
- Ethernet port auto negotiation or manual configuration
- MDI/MDIX automatically sense
- Virtual switch based on 802.1Q VLAN
- VLAN tagging/detagging per Ethernet port

### OAM

- Standard compliant OMCI (the embedded operations channel) interface as defined by ITU-T G.988
- Alarming and performance monitoring
- Remotely software image download over OMCI, as well as activation and rebooting
- Hold two software sets with software image integrity checking and automatic rollback

### Power Supply

- +12V (feed via external AC/DC adaptor)
- 2-PIN power adaptor input
- Dying Gasp support
- Power switch
- Power Consumption: less than 18W

- Flexible mapping between GEM Ports and T-CONT
- Activation with automatic discovered SN and password in conformance with ITU-T G.984.3
- AES-128 Decryption with key generation and switching
- FEC (Forward Error Correction) in both directions
- DBA reporting by piggyback reports in the DBRu (mode 0 and mode 1)
- Mapping of GEM Ports into a T-CONT with priority queues based scheduling
- Support Multicast GEM port and incidental broadcast GEM port.

### LED

- FXS
- 5G WiFi
- 2.4G WiFi
- LAN1 – LAN4
- LOS
- PON
- Power

