

WAG-8F2W6 XGS/GPON Gateway Product Specification

Ver. 1.1

May 2020

Revision History

Rev	Date	ECO	Change Log
1.0	4/5/2020		Initial Revision
1.1	5/15/2020		Add XGS Description

■ Summary

Azores Networks' WAG-8F2W6 XGS/GPON Gateway is best suited for FTTH residential applications. It provides customers with 4 Gigabit Ethernet ports, 2 POTS ports, 1 RF port, 4x4 802.11ax 5G and 2x2 802.11ax 2.4G Wi-Fi.

■ Highlights

- ❖ ITU G.984.x GPON port with 2.488Gbps (downstream) and 1.244Gbps (upstream)
- ❖ ITU-T G.9807.1 XGSPON port with 9.95328Gbps (downstream) and 9.95328Gbps (upstream)
- ❖ 4x 10/100/1000BASE-T Ethernet RJ45 ports
- ❖ 2x POTS ports
- ❖ 1x CATV RF port (GPON model only)
- ❖ 4x4 802.11ax 5G Wi-Fi, provide high bandwidth and low delay service, maximum rate at 4.8Gbps(160MHz)
- ❖ 2x2 802.11ax 2.4G Wi-Fi, provide high bandwidth and low delay service, maximum rate at 574Mbps(40MHz)
- ❖ Wall adaptor
- ❖ 0 to 40°C operating temperature

■ Standard Compliance

- ❖ ITU-T G.984.x
- ❖ ITU-T G.984.2 Amendment 1, Class B+
- ❖ ITU-T G.9807.x
- ❖ ITU-T G.988 OMCI
- ❖ IEEE 802.1p QoS
- ❖ IEEE 802.1q VLAN
- ❖ IEEE 802.3 Ethernet

- ❖ SIP
- ❖ IEEE 802.11n
- ❖ IEEE 802.11ac
- ❖ IEEE 802.11ax

■ Specifications

General

Azores Model	WAG-8F2W6
ONT Type	XGS/GPON Home Gateway with RF and Wi-Fi
Main SoC	BCM68560
Uplink	XGSPON/GPON
Downlinks	4x GE, 2x POTS, 1x RF, 802.11ax 5G, 802.11ax 2.4G
Operating Temperature	0 to 40°C
Operating Humidity	10% to 90%, non-condensing
Dimensions	160X220X34mm
Installation	On desktop or Wall-mount
Weight	0.425kg
Regulatory	CE, FCC (In future)

GPON

GPON Interface	1x SC/APC connector, single mode fiber
Standard Compliance	ITU G.984.2 Class B+ Laser safety standard IEC-60825 Class I
Transmitter	1.244Gbps upstream DFB transmitter in 1310nm, with >=10dB Extinction Ratio Mean launch power in 0.5 to 5dBm range Turn on/off time at burst mode < 12.8ns
Receiver	2.488Gbps downstream APD receiver in 1490nm, with -8 to -28dBm working range Isolation (1441-1450nm),(1530-1539nm)>=25dB Isolation (1260-1441nm),(1539-1625nm)>=35dB

TC Layer	Types 1 to 5 TCONT as defined in G.984.3 32 TCONT, 256 GEM Ports Flexible mapping between TCONT and GEM Ports
GPON Features	Dying Gasp, Forward Error Correction (FEC), Configurable AES decryption in the downstream direction

XGSPON

XGSPON Interface	1x SC/APC connector, single mode fiber
Standard Compliance	ITU G.987.2 Laser safety standard IEC-60825 Class I
Transmitter	9.95328Gbps upstream DFB transmitter in 1270nm, with >=6dB Extinction Ratio Mean launch power in 4 to 9 dBm range Turn on/off time at burst mode < 25.7ns
Receiver	9.95328Gbps downstream APD receiver in 1577nm, with - 8 to -28dBm working range Isolation >=30dB
TC Layer	Types 1 to 5 TCONT as defined in G.984.3 32 TCONT, 256 GEM Ports Flexible mapping between TCONT and GEM Ports
XGSPON Features	Dying Gasp, Forward Error Correction (FEC), Configurable AES decryption in both directions

Ethernet LAN

Ethernet Interface	4x RJ45 connectors
Standard Compliance	IEEE 802.3, 802.3u, 802.3ab
Link	Half-duplex and full-duplex operations 10/100/1000Mbps auto-negotiation and manual configuration MDI/MDIX auto detection

POTS

POTS Interface	2x RJ-11 connectors
Ringling	5 REN
Soft Switch Support	SIP

RF (GPON Model)

CATV Signal	47MHz to 1002MHz
Optical Input Power	-8 to 2 dBm
RF Output	17 dBmV \pm 2

2.4G Wi-Fi

MIMO	2x2
Antenna	External Antennas with 5dBi Gain
Standard	802.11b/g/n/ax
Speed	574Mbps
EIRP	26dBm

5G Wi-Fi

MIMO	4x4
Antenna	External Antennas with 5dBi Gain
Standard	802.11b/g/n/ac/ax
Speed	4.8Gbps
EIRP	26dBm

OAM

LED	Power, PON, LOS, Internet LAN1, LAN2, LAN3, LAN4, Phone1, Phone2, 2.4G, 5G, CATV USB
Management	OMCI, CLI, Web, Telnet, TR069
Firmware Upgrade	Firmware upgrade, active and alternative firmware images
Diagnostics	Enhanced PON debug and diagnostic functions Log files, memory allocation and crash check
Alarm	Alarm report and suppression (ARC)
PM	All standard PM counters

Power

Power Options	Wall adapter and
Wall Adapter	Standard barrel connector 100-240VAC in, 50/60Hz 12VDC out, 2.0A max

■ Product Photos



■ Contact

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