

**2CH WDM GPON 1310/1490nm And XGS-PON 1270/1577nm SC/APC Module 75*65*14MM
FW-2G-M02A-GX**

With the rapid development of emerging technologies such as 5G and the Internet of Things, the demand for bandwidth is continuously increasing. To meet these demands, Passive Optical Network (PON) technologies are also evolving. GPON and XGS-PON, are the main PON technologies currently in use, and they have achieved coexistence on the same fiber through Wavelength Division Multiplexing (WDM) technology, thereby enhancing the network's bandwidth and flexibility.

GPON (Gigabit-Capable Passive Optical Network)

Features: GPON supports downstream rates of 2.5Gbps and upstream rates of 1.25Gbps, with split ratios ranging from 1:16 to 1:128. It uses WDM technology to simultaneously transmit video, data, and voice over the same fiber.

Application Scenarios: It is widely used in home broadband access, enterprise networks, and smart cities.

XGS-PON (10G Symmetric PON)

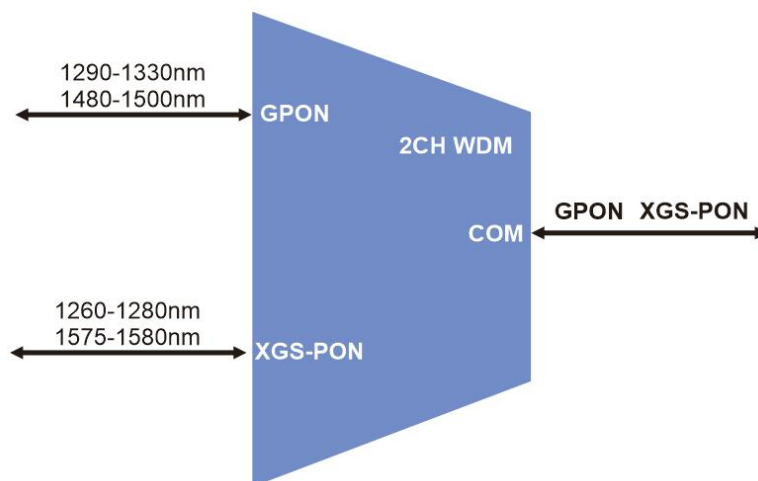
Features: XGS-PON supports symmetrical 10Gbps uplink and downlink rates, with split ratios ranging from 1:16 to 1:256. It uses Time and Wavelength Division Multiplexing (TWDM) technology to coexist with GPON on the same fiber.

Application Scenarios: It is suitable for scenarios that require high-bandwidth symmetrical transmission, such as enterprise networks, data center interconnection, and 5G fronthaul.

Advantages

- ◆ **Bandwidth Increase:** By adding wavelength channels, the transmission bandwidth of the fiber is significantly increased.
- ◆ **Cost-Effective:** It increases network capacity without adding extra fibers, reducing deployment costs.
- ◆ **Flexibility:** It supports the coexistence of multiple PON technologies, such as GPON, XGS-PON.

Application



Product Panel



2CH WDM GPON And XGS-PON SC/APC, E/G: EPON/GPON; XG: XG-PON

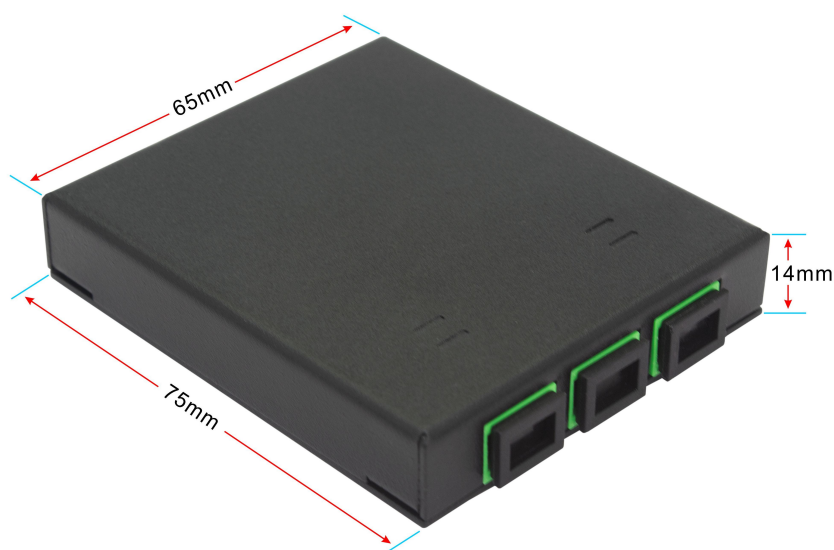
Specifications

Parameter		Specification	Unit
Bandpass	GPON	1290-1330/1480-1550	nm
	XGS-PON	1260-1280/1575-1580	nm
Insertion Loss	COM - GPON	<0.9	dB
	COM - XGS-PON	<0.8	dB
Wavelength	COM - GPON	>30	dB
Isolations	COM - XGS-PON	>12	dB
Unifomit		<0.8	dB
Return Loss		>55	dB

Directivity	>55	dB
PDL (Polarization Dependant Loss)	<0.3	dB
(Polarization Mode Dispersion)	<0.2	PS
Optical Power Handling	<300	mW
Operating Temperature	-40 to +85	°C
Operating Relative Humidity	5 to 90	% RH
Storage Temperature	-40 to +85	°C
Operating Relative Humidity	5 to 90	% RH
Net Weight	0.15KG	KG
Dimensions	75*65*14	mm

Insertion Loss includes WDL, TDL and PDL WITH two sets of mated connectors at both ends.

Package Information



Order Information

Product No.	Product description
FW-2G-M02A-GX	2CH WDM GPON And XGS-PON SC/APC Plug-in LGX Box 75*65*14MM

Note: We Support Customized Design, please contact us by email.