

**4CH WDM GPON XGS-PON NG-PON2+PtP And OTDR Plug-in LGX Box 215*150*20MM
FW-3G-LGX02-GXNPO**

With the rapid development of emerging technologies such as 5G, the Internet of Things, and cloud computing, the demand for bandwidth is continuously increasing. To meet these demands, Passive Optical Network (PON) technologies are also evolving. GPON, XGS-PON, and NG-PON2+PtP are the main PON technologies currently in use, while OTDR (Optical Time Domain Reflectometer) is a tool used for network fault diagnosis and maintenance. Through 4CH WDM (Four-Channel Wavelength Division Multiplexing) technology, these technologies can coexist on the same fiber, 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.

NG-PON2 (Next-Generation PON2)+PtP

Features: NG-PON2 uses WDM technology to create up to eight wavelength-separated PON trees on the same fiber. It supports uplink and downlink rates of up to 10Gbps, with split ratios ranging from 1:16 to 1:256. It supports TWDM-PON and point-to-point WDM-PON, making it suitable for

a variety of new use cases.

Application Scenarios: NG-PON2 is suitable for enterprise networks, mobile backhaul and fronthaul, and scenarios that require high bandwidth and flexible wavelength allocation.

OTDR (Optical Time Domain Reflectometer)

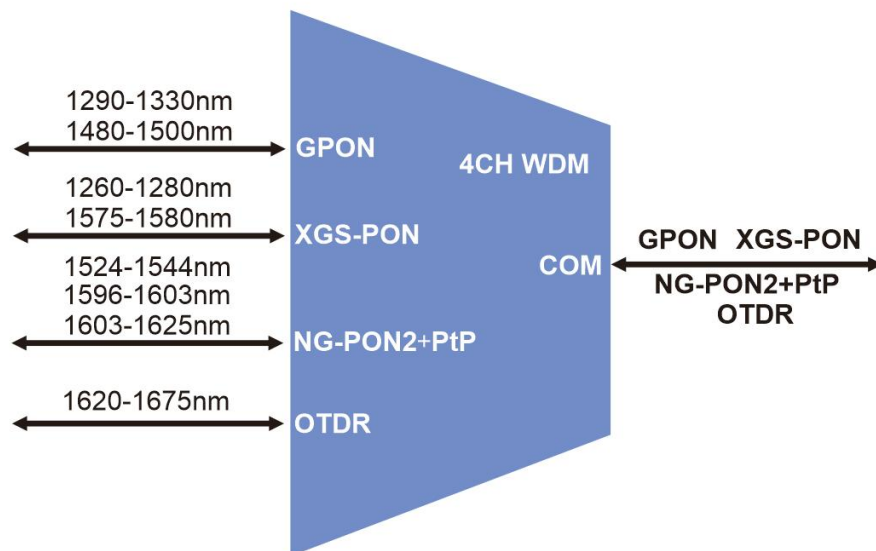
Features: OTDR is a tool used for fiber optic network fault diagnosis and maintenance, capable of detecting breaks, losses, and reflection points in the fiber.

Application Scenarios: It is widely used in the installation, maintenance, and troubleshooting of fiber optic networks.

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, NG-PON2+PtP, OTDR

Application

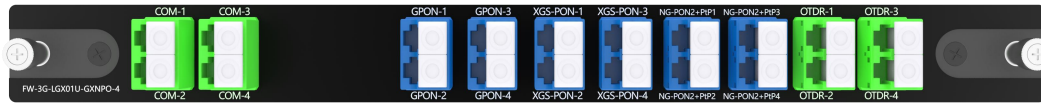


Product Panel



4CH WDM GPON XGS-PON NG-PON2+PtP And OTDR, PON SC/UPC , COM AND OTDR SC/APC Plug-in LGX Box 215*150*20MM



2X4CH WDM GPON XGS-PON NG-PON2 And OTDR, PON SC/UPC , COM AND OTDR SC/APC**Plug-in LGX Box 215*150*20MM****4X4CH WDM GPON XGS-PON NG-PON2 And OTDR, PON LC/UPC , COM AND OTDR LC/APC****Plug-in LGX Box 215*150*20MM****Specifications**

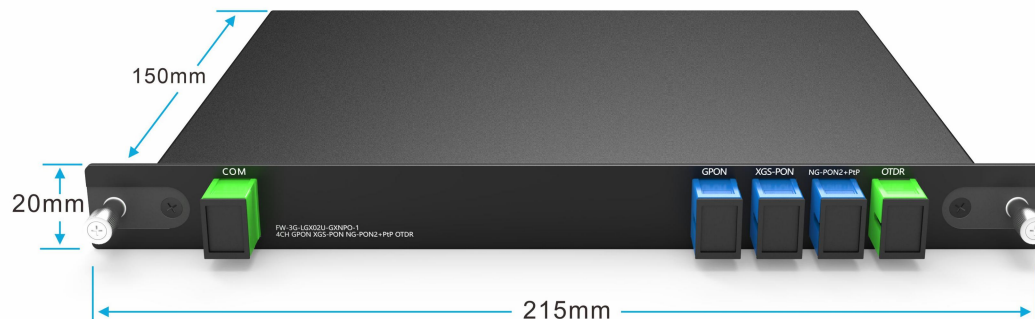
Parameter		Specification	Unit
Bandpass	GPON	1290-1330/1480-1550	nm
	XGS-PON	1260-1280/1575-1580	nm
	NG-PON2+PtP	1524-1544/1596-1625	nm
	OTDR	1625-1675	nm
Insertion Loss	COM - GPON	<0.9	dB
	COM - XGS-PON	<1.1	dB
	COM - NG PON2	<1.3	dB
	COM - OTDR	<1.6	dB
Wavelength Isolations	COM - GPON	>30	dB
	COM - XGS-PON	>30	dB
	COM - NG PON2+PtP	>30	
	COM - OTDR	>30	dB
Unifomit		<0.8	dB
Return Loss		>55	dB
Directivity		>55	dB
PDL (Polarizarion 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		LGX Box: 0.5KG 2slot 1U Rack: 2.5KG	KG
Dimensions		LGX Box: 215*150*20mm 1U Rack : 440*160*44mm	mm

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

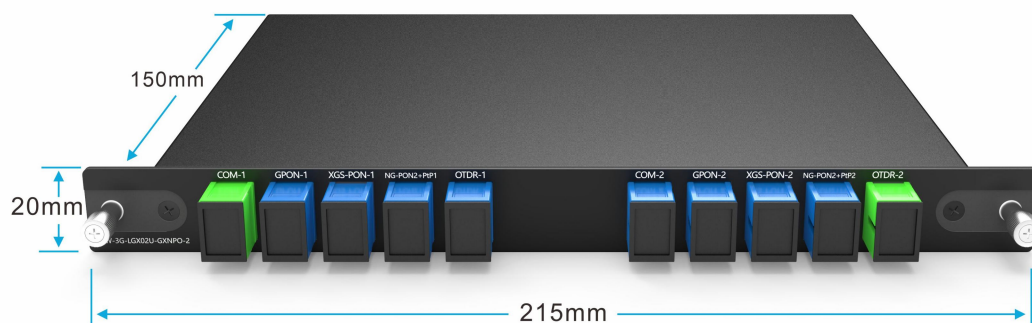
Package Information

LGX BOX Plug in 4-Slot 1U Rack

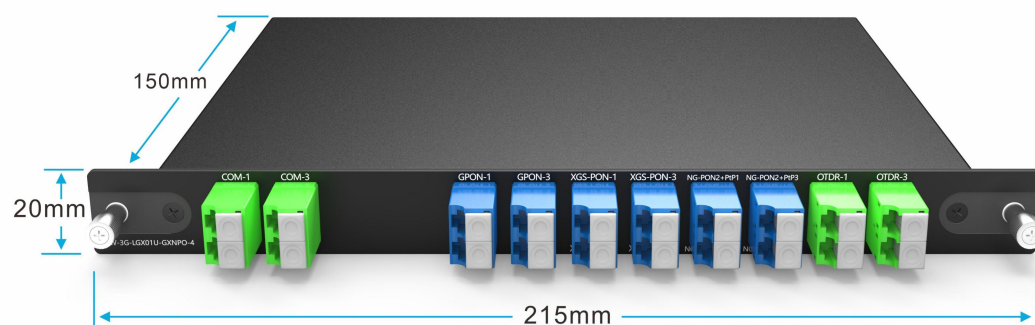
4CH WDM



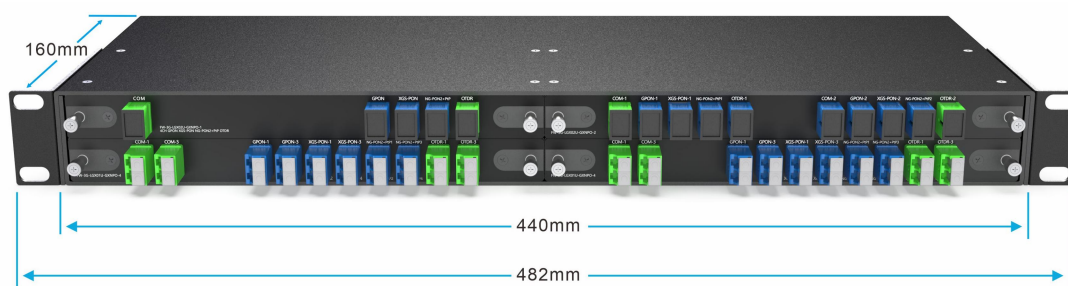
2x4CH WDM



4x4CH WDM



4-Slot 1U Rack for LGX BOX



Order Information

Product No.	Product description
FW-3G-LGX02-GXNPO-1	4CH WDM GPON XGS-PON NG-PON2+PtP AND OTDR, PON SC/UPC, COM AND OTDR SC/APC Plug-in LGX Box 215*150*20MM
FW-3G-LGX02-GXNPO-2	2x4CH WDM GPON XGS-PON NG-PON2+PtP AND OTDR, PON SC/UPC, COM AND OTDR SC/APC Plug-in LGX Box 215*150*20MM
FW-3G-LGX01-GXNPO-4	4x4CH WDM GPON XGS-PON NG-PON2+PtP AND OTDR, PON LC/UPC, COM AND OTDR LC/APC Plug-in LGX Box 215*150*20MM
1U02-4LGX	19" inch 1U rack with 4 slot for Plug-in LGX box, 440*160*44mm

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