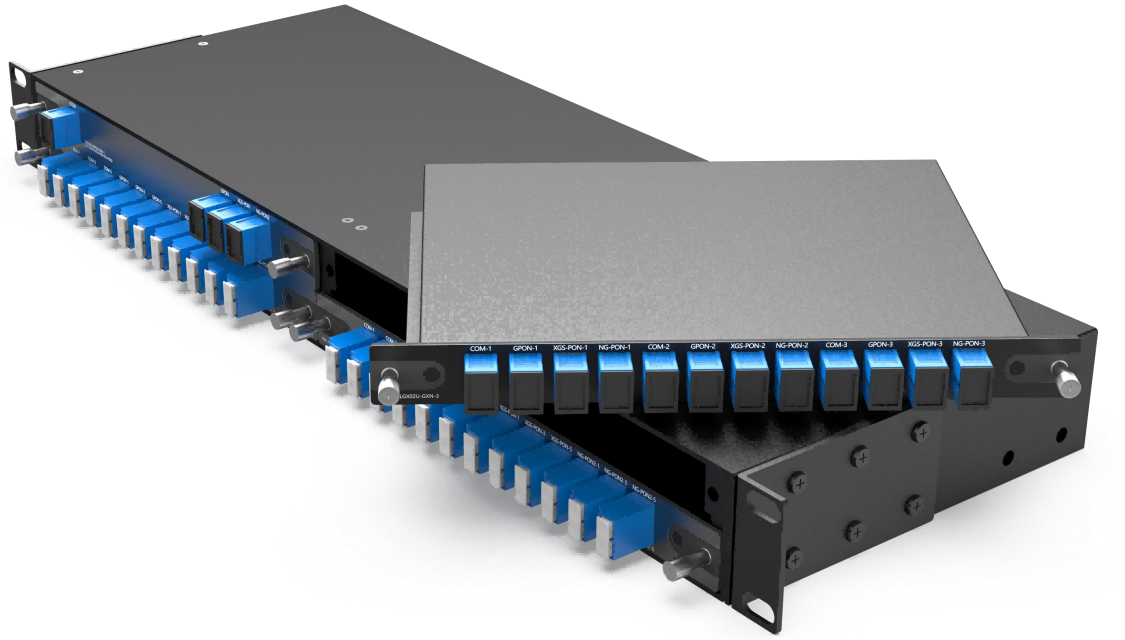
3CH WDM GPON XGS-PON AND NG-PON2 Plug-in LGX Box 215*150*20MM
FW-3G-LGX02U-GXN



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, XGS-PON, and NG-PON2 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.

NG-PON2 (Next-Generation PON2)

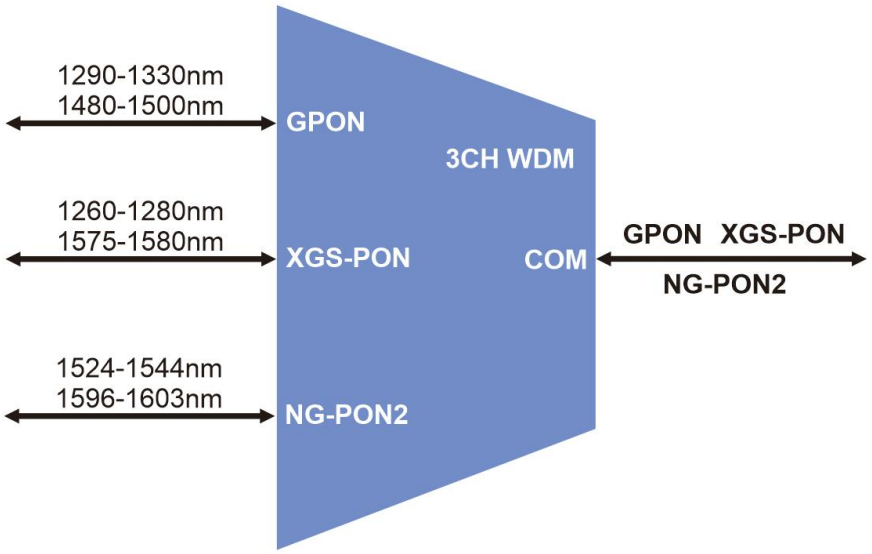
Features: NG-PON2 uses WDM technology to create up to eight wavelength-separated PON trees on the same fiber. It supports uplink and downlink rates of up to 10Gbps, with split ratios ranging from 1:16 to 1:256. It supports TWDM-PON and point-to-point WDM-PON, making it suitable for a variety of new use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

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

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, and NG-PON2.

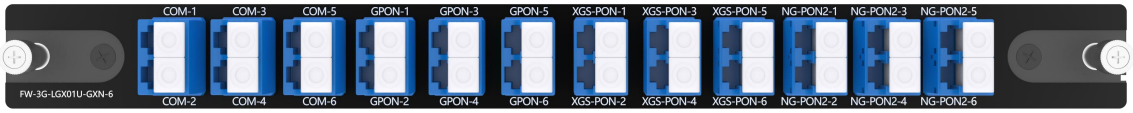
Application



Product Panel

3CH WDM GPON XGS-PON AND NG-PON2 SC/UPC Plug-in LGX Box 215*150*20MM

3X3CH WDM GPON XGS-PON AND NG-PON2 SC/UPC Plug-in LGX Box 215*150*20MM



6X3CH WDM GPON XGS-PON AND NG-PON2 LC/UPC Plug-in LGX Box 215*150*20MM

Specifications

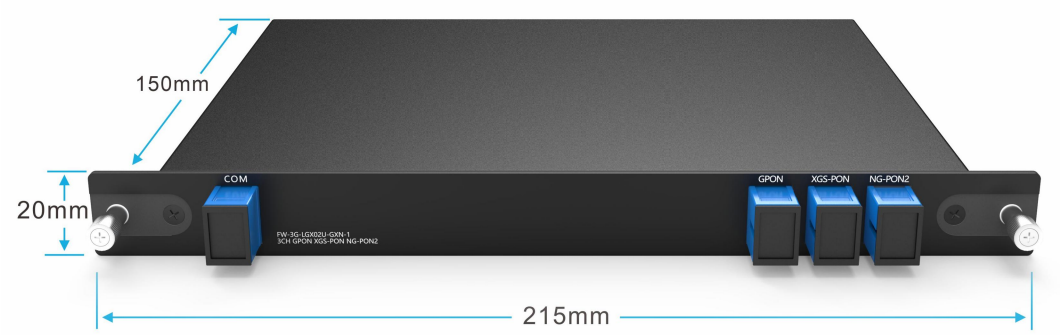
Parameter		Specification	Unit
Bandpass	GPON	1290-1330/1480-1550	nm
	XGS-PON	1260-1280/1575-1580	nm
	NG-PON2	1524-1544/1596-1603	nm
Insertion Loss	COM - GPON	<0.9	dB
	COM - XGS-PON	<1.1	dB
	COM - NG PON2	<1.3	dB
Wavelength Isolations	COM - GPON	>30	dB
	COM - XGS-PON	>30	dB
	COM - NG PON2	>30	dB
Unifomit		<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 Handing		<300	mW
Operating Temperature		-40 to +85	℃
Operating Relative Humidity		5 to 90	% RH
Storage Temperature		-40 to +85	℃
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.

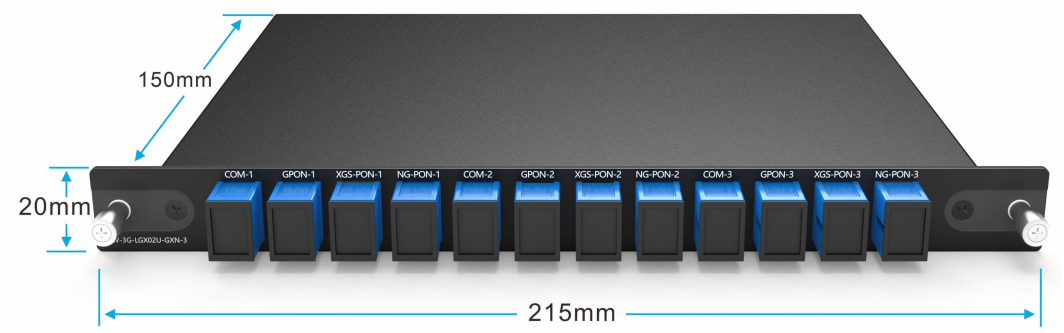
Package Information

LGX BOX Plug in 4-Slot 1U Rack

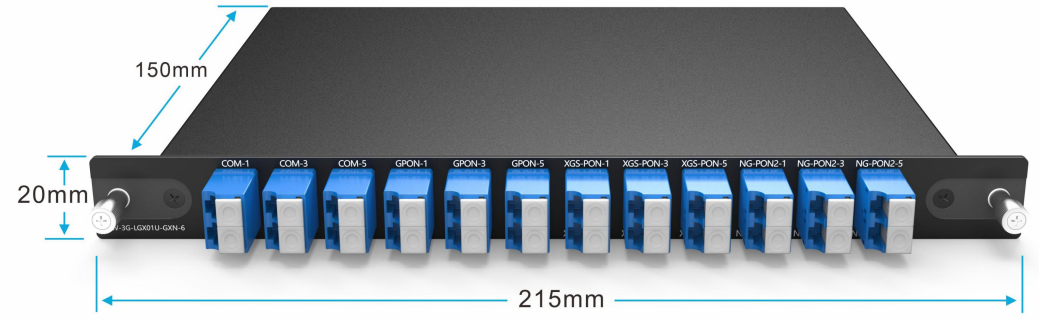
3CH WDM



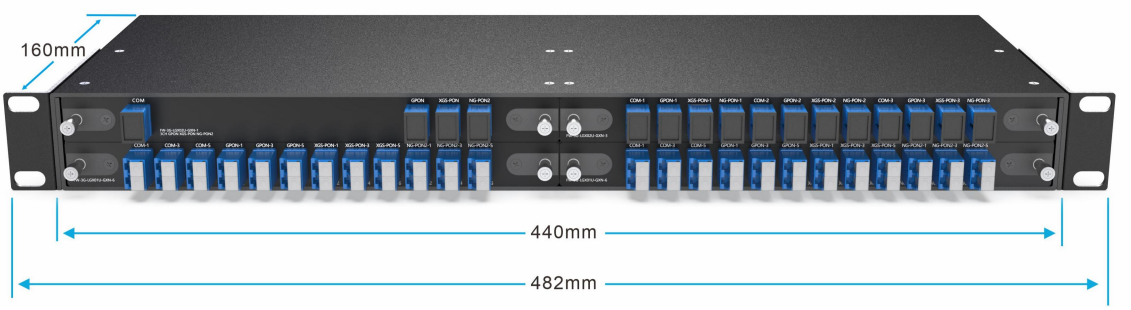
3x3CH WDM



6x3CH WDM



4-Slot 1U Rack for LGX BOX



Order Information

Product No.	Product description
FW-3G-LGX02U-GXN	3CH WDM GPON XGS-PON AND NG-PON2 SC/UPC Plug-in LGX Box 215*150*20MM
FW-3G-LGX02U-GXN-3	3x3CH WDM GPON XGS-PON AND NG-PON2 SC/UPC Plug-in LGX Box 215*150*20MM
FW-3G-LGX01U-GXN-6	6x3CH WDM GPON XGS-PON AND NG-PON2 LC/UPC 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.