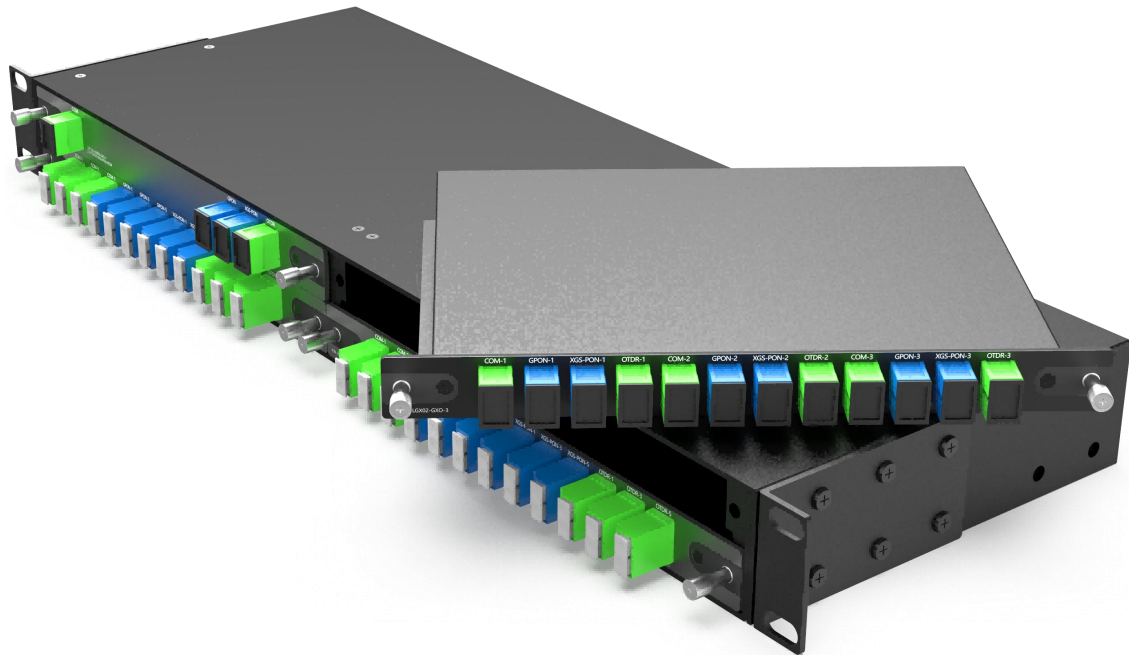


**3CH WDM GPON XGS-PON And OTDR Plug-in LGX Box 215\*150\*20MM  
FW-2G-LGX02-GXO**

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 and XGS-PON 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 3CH 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.

**OTDR (Optical Time Domain Reflectometer)**

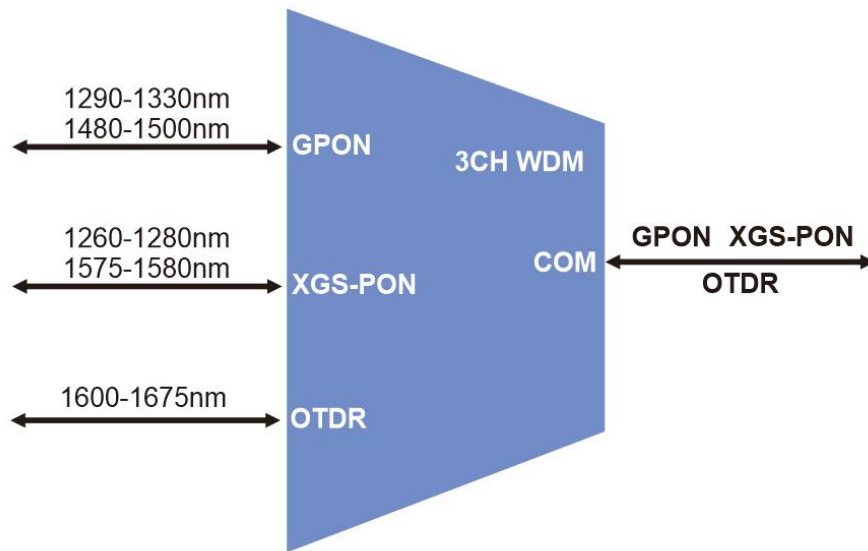
Features: OTDR is a tool used for fiber optic network fault diagnosis and maintenance, capable of detecting breaks, losses, and reflection points in the fiber.

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, OTDR

### Application



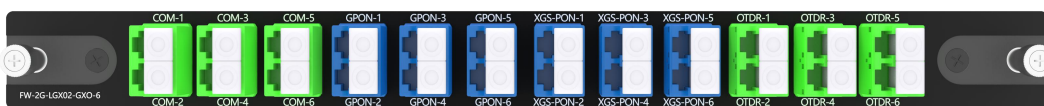
### Product Panel



**3CH WDM GPON XGS-PON And OTDR, PON SC/UPC, COM AND OTDR SC/APC Plug-in LGX Box 215\*150\*20MM**



**3X3CH WDM GPON XGS-PON And OTDR, PON SC/UPC, COM AND OTDR SC/APC Plug-in LGX Box 215\*150\*20MM**



**6X3CH WDM GPON XGS-PON And OTDR, PON LC/UPC, COM AND OTDR LC/APC Plug-in LGX**

Box 215\*150\*20MM

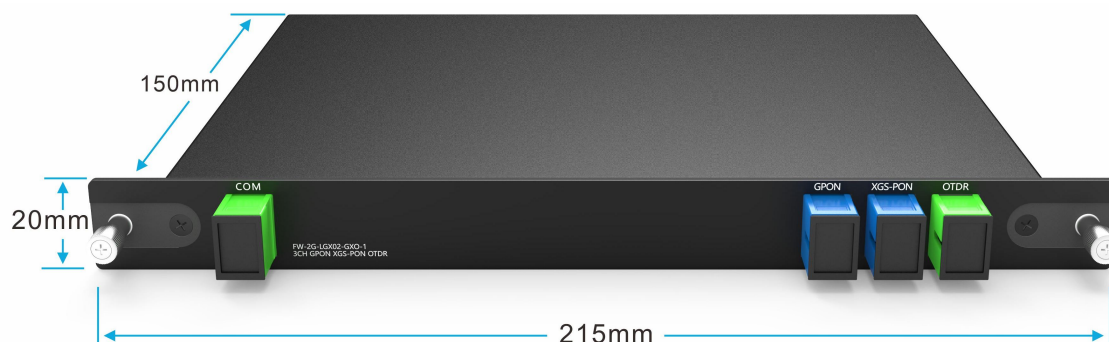
**Specifications**

| Parameter                         |               | Specification                                   | Unit |
|-----------------------------------|---------------|-------------------------------------------------|------|
| Bandpass                          | GPON          | 1290-1330/1480-1550                             | nm   |
|                                   | XGS-PON       | 1260-1280/1575-1580                             | nm   |
|                                   | OTDR          | 1600-1675                                       | nm   |
| Insertion Loss                    | COM - GPON    | <0.9                                            | dB   |
|                                   | COM - XGS-PON | <1.1                                            | dB   |
|                                   | COM - OTDR    | <1.3                                            | dB   |
| Wavelength Isolations             | COM - GPON    | >30                                             | dB   |
|                                   | COM - XGS-PON | >30                                             | dB   |
|                                   | 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<br>2slot 1U Rack: 2.5KG          | KG   |
| Dimensions                        |               | LGX Box: 215*150*20mm<br>1U Rack : 440*160*44mm | mm   |

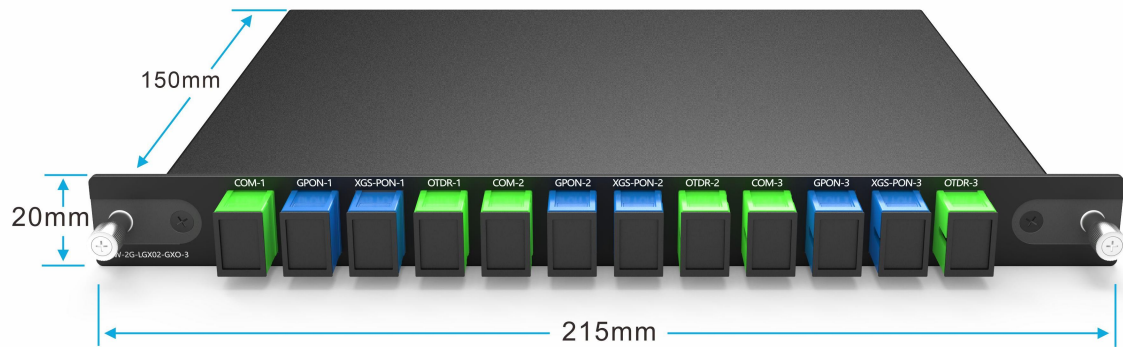
Insertion Loss includes WDL, TDL and PDL WITH two sets of mated connectors at both ends.

**Package Information**

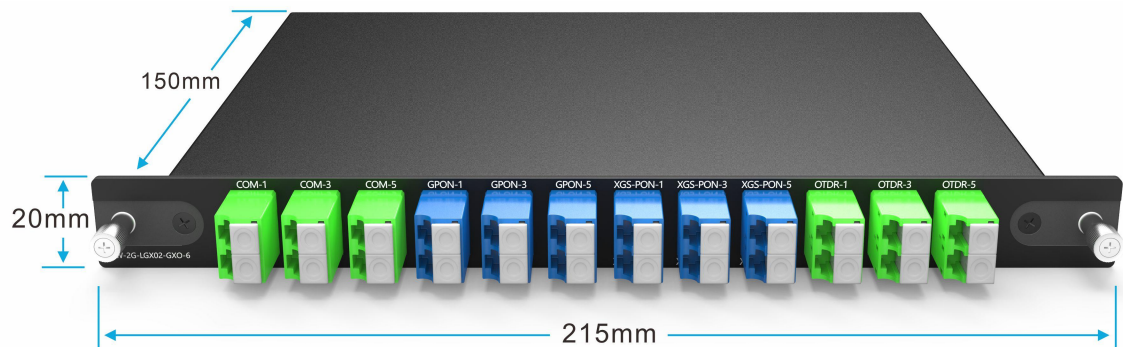
LGX BOX Plug in 4-Slot 1U Rack

**3CH WDM**

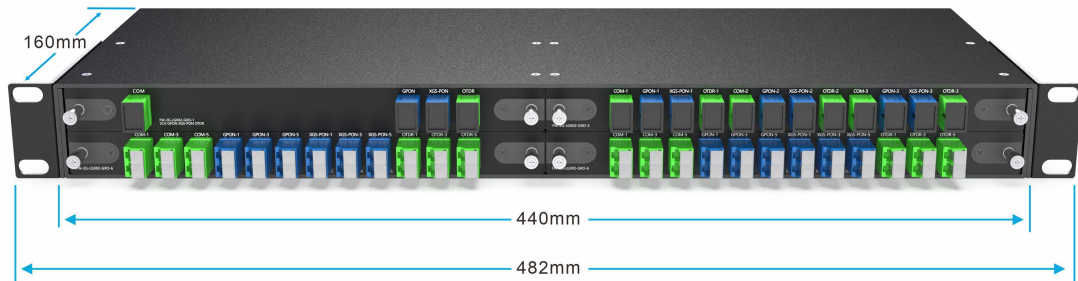
### 3x3CH WDM



### 6x3CH WDM



### 4-Slot 1U Rack for LGX BOX



### Order Information

| Product No.       | Product description                                                                           |
|-------------------|-----------------------------------------------------------------------------------------------|
| FW-2G-LGX02-GXO-1 | 3CH WDM GPON XGS-PON AND OTDR, PON SC/UPC, COM AND OTDR SC/APC Plug-in LGX Box 215*150*20MM   |
| FW-2G-LGX02-GXO-3 | 3x3CH WDM GPON XGS-PON AND OTDR, PON SC/UPC, COM AND OTDR SC/APC Plug-in LGX Box 215*150*20MM |
| FW-2G-LGX01-GXO-6 | 6x3CH WDM GPON XGS-PON 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.**