

## GIGALIGHT Marketing Report Special Issue on Parallel Single-mode High-speed Optical Modules

Q4 Vol.11

The parallel high-speed optical modules transmit signals through multiple parallel optical fibers, and each optical fiber independently carries a single-channel optical signal. In this way, the interference of optical signals between different channels can be completely avoided, and the stability of transmission is ensured.

GIGALIGHT's parallel high-speed optical modules adopt mature optical devices and manufacturing processes, which have great cost advantages comparing with WDM optical modules under the same scenario. Benefiting from more than ten years of R&D and manufacturing experience of GIGALIGHT, power consumption of the module is generally lower than similar products in the market. All modules have undergone very rigorous reliability testing to provide lower bit error rates and higher signal integrity.

### Product Portfolio Introduction



Low Cost



Low Power Consumption



High Performance



High Reliability

#### Main Features

- The Single mode series adopt 1310nm FP/DFB laser and PIN receiver
- Transmission distance reaches up to 2km to 10km
- Various transmission rates are available from 40G to 400G
- Single MPO optical interface (UPC or APC polished type)
- Tested and certified in switch network systems

#### Advantages

- Highest performance HPC high-speed interconnect solution
- Industry-leading low power consumption feature
- Tested with real-world switch interconnect network and ready to use out of the box
- Exceeds IEEE BER standards for reliable operation under harsh conditions
- Optional industrial-grade operating temperature range for ultra-high reliability



### 400G Series

400G QSFP-DD DR4 Silicon Photonics	400G QSFP-DD XDR4/PLR4	400G QSFP-DD PSM8
☞ 500m	☞ 2km/10km	☞ 2km/10km
⚡ Power Consumption<10W	⚡ Power Consumption<10W	⚡ Power Consumption<11W
🔗 Silicon Photonics Integration	🔗 7nm DSP	🔗 7nm DSP
⚡ 4x100G PAM4	⚡ 4x100G PAM4	⚡ 8x50G PAM4



### 200G Series

200G QSFP-DD PSM4	200G QSFP-DD PSM8
☞ 2km/10km	☞ 2km/10km
⚡ Power Consumption<5.5W	⚡ Power Consumption < 6W (2km) or 6.5W (10km)
🔗 7nm DSP	🔗 Industrial-grade Optional
⚡ 4x50G PAM4	⚡ 8x25G NRZ

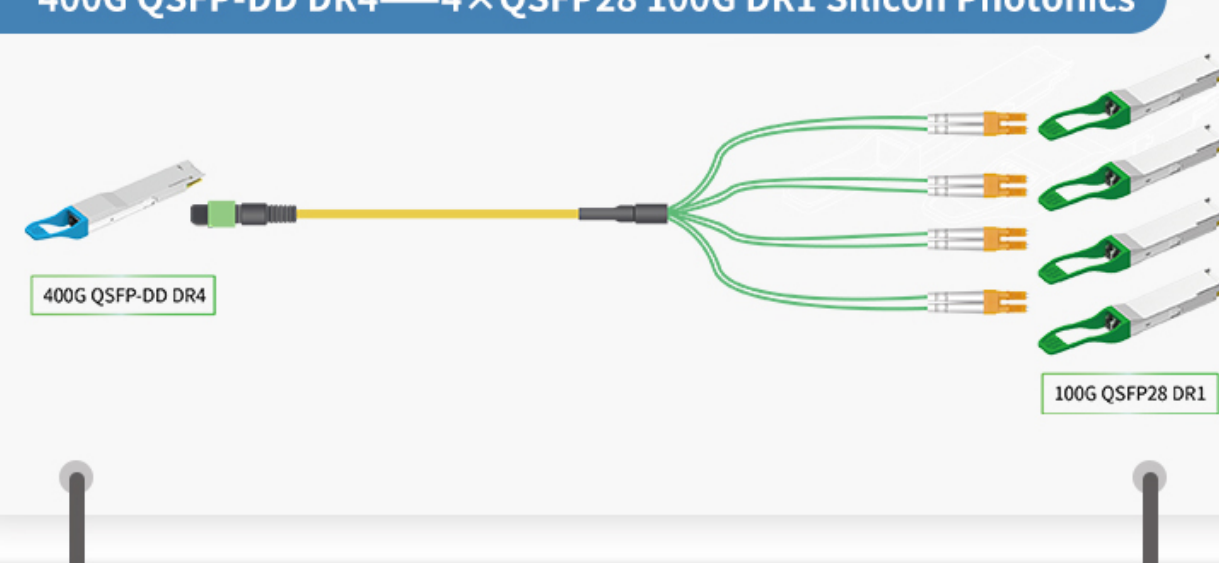


### 40G/100G Series

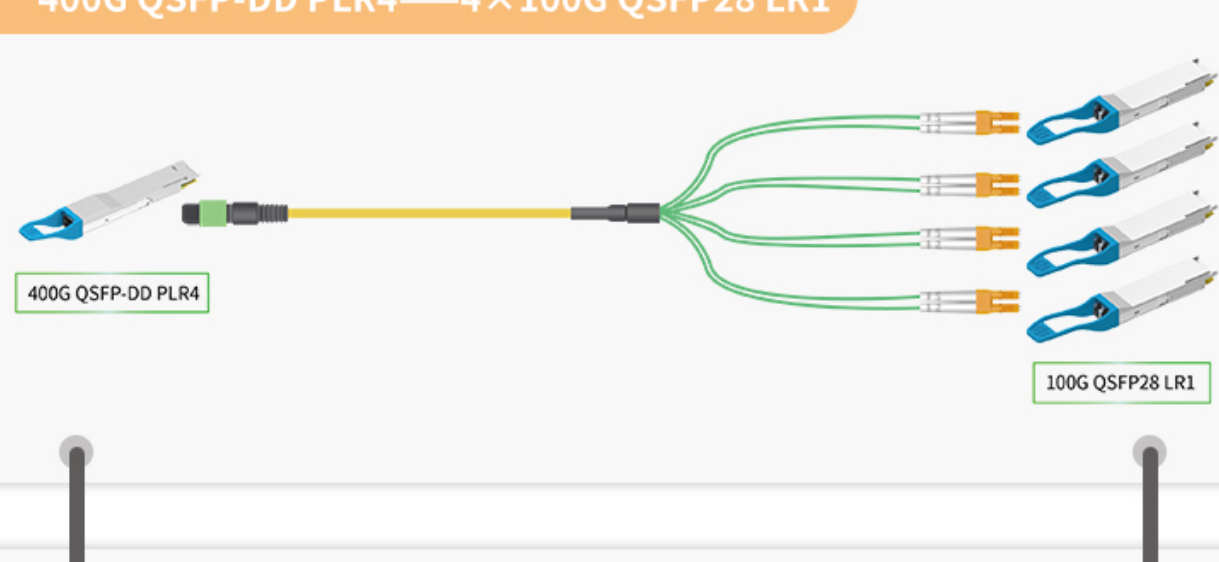
100G QSFP28 PSM4	40G QSFP+ PSM4/XPSM4
☞ 2km/10km	☞ 2km/10km/30km
⚡ Power Consumption < 3.5W	⚡ Power Consumption < 2.5W
🔗 Industrial-grade, Liquid-cooling Version Optional	🔗 Performance Enhanced Version
⚡ 4x25G NRZ	⚡ 4x10G NRZ

### Networking Application

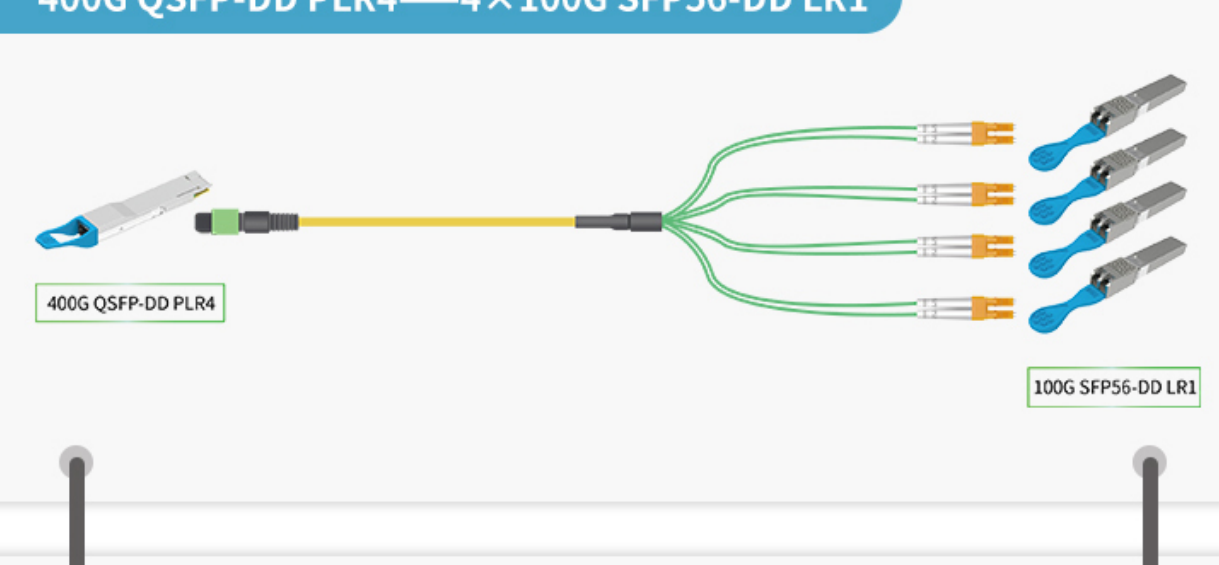
#### 400G QSFP-DD DR4—4xQSFP28 100G DR1 Silicon Photonics



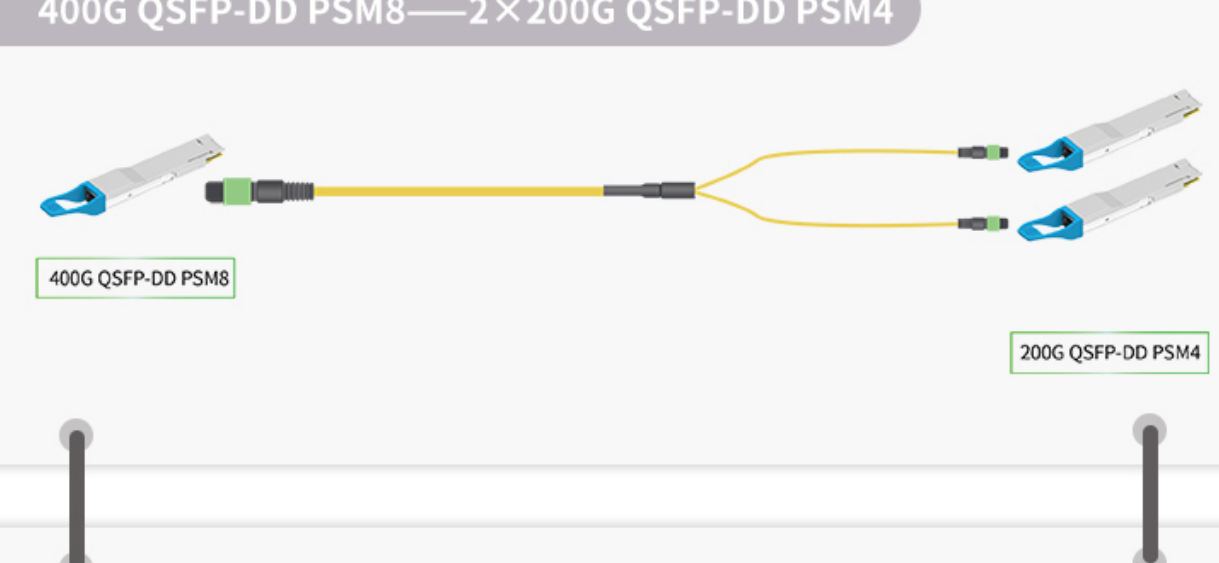
#### 400G QSFP-DD PLR4—4x100G QSFP28 LR1



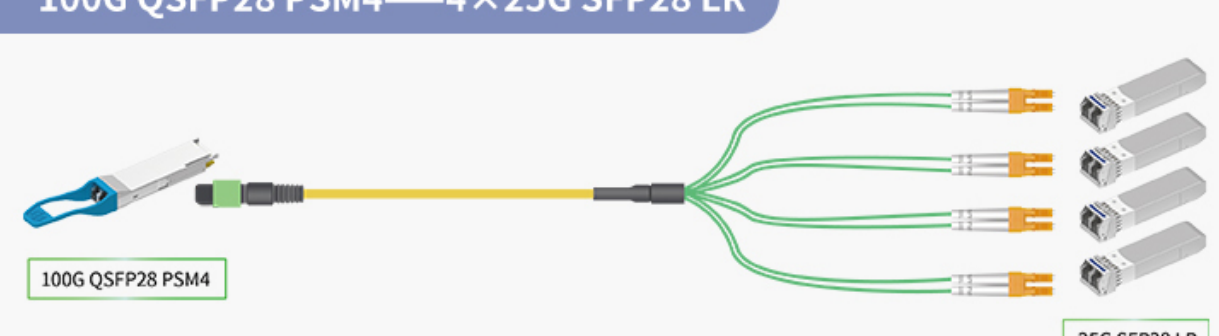
#### 400G QSFP-DD PLR4—4x100G SFP56-DD LR1



#### 400G QSFP-DD PSM8—2x200G QSFP-DD PSM4



#### 100G QSFP28 PSM4—4x25G SFP28 LR



\*If you are interested in our products or solutions, please reply to the email directly to explain your needs, and our sales manager will get in touch with you as soon as possible!



Open Optical Network Device Explorer

