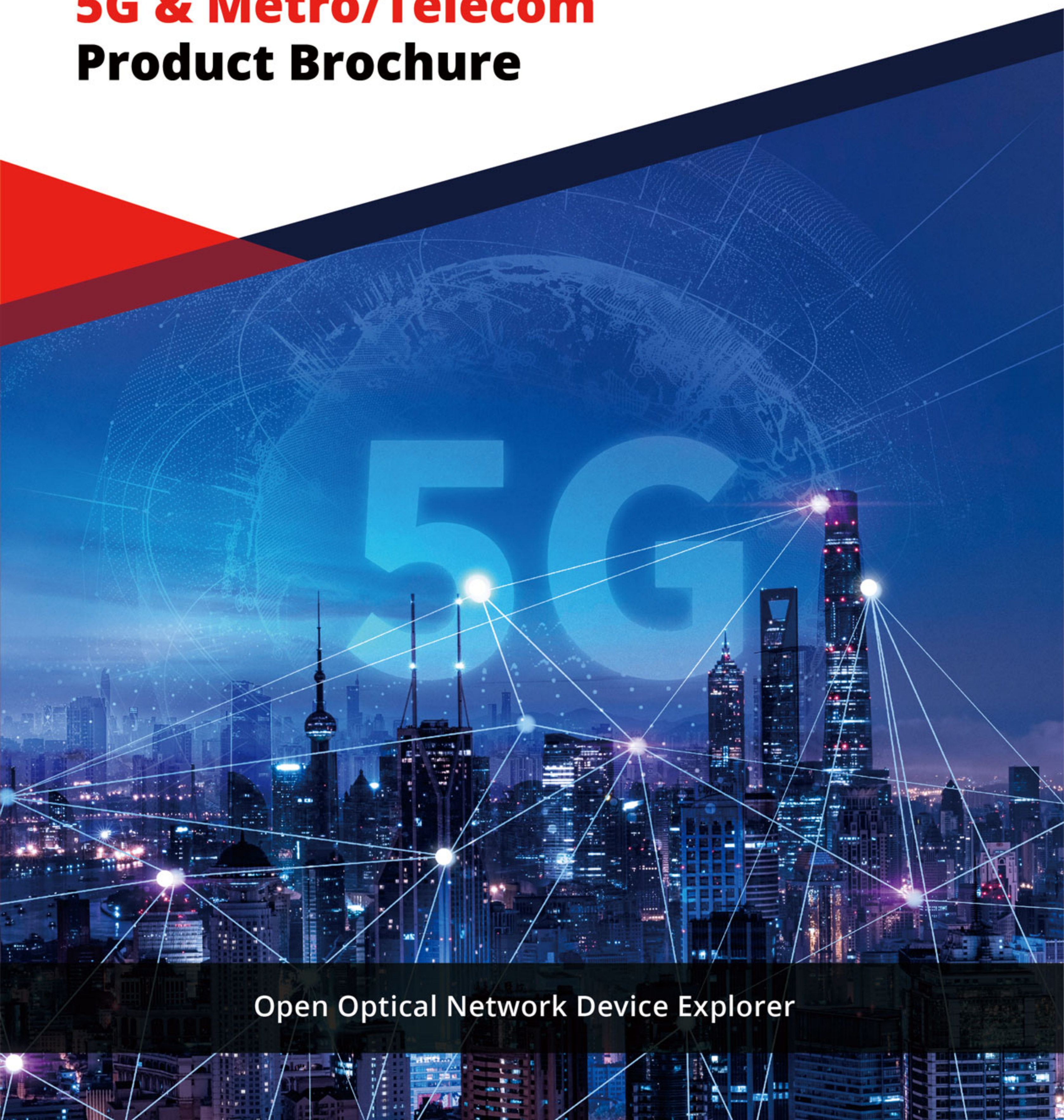




The Open Optical Devices for 5G & Metro/Telecom Product Brochure



Open Optical Network Device Explorer

Company Profile

Open Optical Network Device Explorer

Who We Are

Founded in 2006, GIGALIGHT is an enterprise with outstanding brand influence in the field of global optical communications, positioned as a technology innovator and market explorer in the field of open optical networks.

GIGALIGHT's business focuses on developing decoupled optical network modules and subsystems to reduce CAPEX and OPEX for data centers and telecom operators. Since its establishment, the company has actively cooperated with global operators to realize the interconnection of optical networks, and has been widely recognized as a veritable advocate and leader of open optical interconnection middleware.

What We Do

In recent years, the company has continued to develop silicon photonics technology and silicon-based coherent communication technology, aiming to further promote the optical layer opening and interface compatibility of open optical networks through these new technologies, and has made good progress. (Note: GIGALIGHT is a member of the OpenZR+ MSA team.)

Aiming to become a one-stop device integration solution provider in the field of open optical networks, GIGALIGHT has launched many active and passive products to meet the needs of various types of interconnections and interfaces in open optical networks (especially open data centers)—optical transceivers, active optical cables (AOC), direct-attached copper cables (DAC), silicon photonics optical transceivers, liquid-cooling optical transceivers, high-definition video optical modules, coherent optical modules and coherent transmission subsystems, active/passive WDMs, passive optical access devices and high-density cablings, etc.

Our Goal

The development of GIGALIGHT benefits from more than 300 small and medium-sized customers around the world, who promote the growth of the company and the progress of employees. In order to give back to customers, GIGALIGHT takes the continuous development of new technologies and the creation of ultra-compatible optical network middleware and subsystems for the open optical network as the company's unswerving goal.

To achieve this goal, GIGALIGHT has built a series of technology platforms, including software and hardware design and high-speed signal integrity platform, COB hybrid packaging technology platform, silicon-based optoelectronic chip design and packaging platform, and COM-based computing and management of multi-channel DAC manufacturing platform, as well as a coherent optical communication technology platform with self-developed algorithms, etc. The company has a world-class compatibility testing laboratory in the field of optoelectronics.

Office Locations



Headquarters & Marketing Center



R&D, Operations and Sales center



Wuhan Technology Center

Shenzhen Headquarters (Finance & Marketing): 17th Floor, Zhongtai Tiancheng Building

Shenzhen R&D Center: Changfeng Industrial Park

Wuhan R&D Center: Optics Valley New Power Industrial Park

Shenzhen Factory: Changfeng Industrial Park

Global Sales Office: Shenzhen, Beijing, Shanghai, Russia, Singapore



**Metro/WDM &
Coherent Communications**



5G Carrier Network



Data Center & Server



Corporate Mission

Serving open data center and open optical communication markets.



Corporate Vision

Create every unusual GIGALIGHT in every corner of the optical network.
Undertake every interconnection task in every node of the optical network.



Corporate Strategy

Carry out the principles of integration and differentiation.



Corporate Purpose

Keep providing high-speed optical interconnection products of innovative design and simplest scheme.



Quality Policy

Quality enhances the brand, and the brand leads the future.
Improve quality and gallop in the optical communication industry.
Lean quality management and refine customer needs.
Build core competitiveness and achieve ideal company.

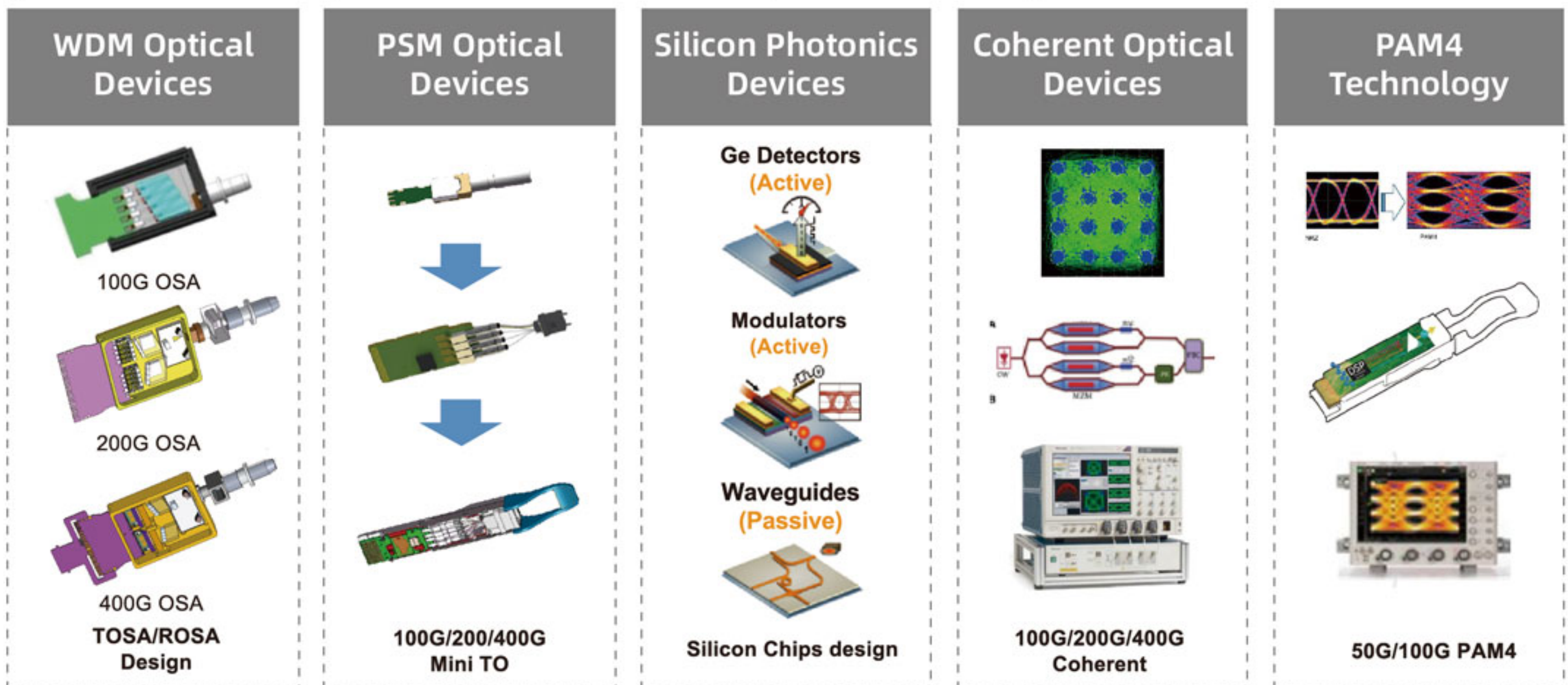
Core Competencies

Rich Portfolios to Provide Integrated Solutions for Global Markets

After more than ten years of development, we have built a rich product line of active & passive optical network devices, including optical transceivers and coherent transmission subsystems, etc., which can meet the needs of various interconnection application scenarios such as data centers and 5G. The company is now fully equipped to provide and deliver low-cost one-stop integrated solutions for global telecom operators and small and medium data center customers.

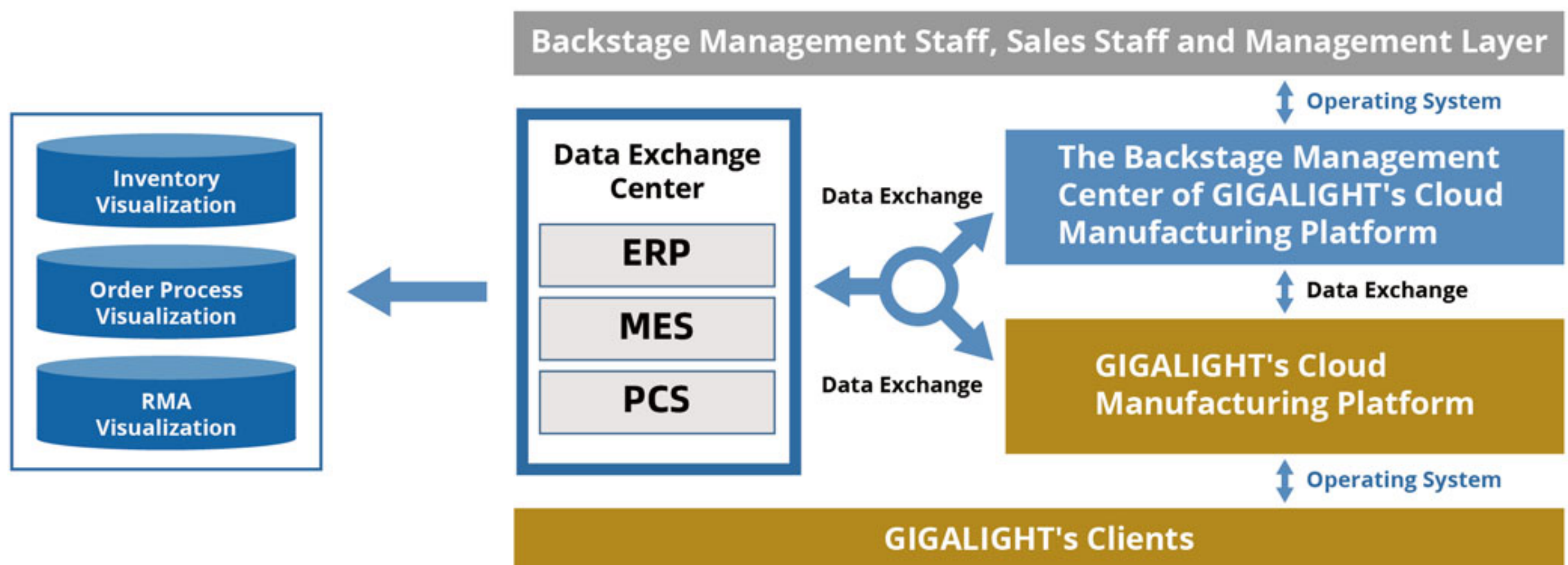
Reliable Technologies & Platforms to Ensure Differentiation

The parallel light engine & WDM light engine based on traditional III-V family, 8-channel optics, silicon photonics (light source, light engine, software algorithm, module packaging), software & hardware coherent optics, liquid-cooling optics, high-definition video optics, high-speed DAC automated assembly and testing platform, passive micro optics packaging and other technologies or platforms are the guarantee for GIGALIGHT to provide customers with differentiated products and technologies.



Advanced Cloud Manufacturing System to Enable Visual Production

We have independently developed an advanced cloud manufacturing system that integrates our manufacturing execution system (MES), electronic panel manufacturing system, automatic adjustment test system (designed for transceiver optics) and an order inventory visualization system to achieve visual customization and management of production for our customers.



Strong Compatibility & Innovative Ecosystem to Improve Experience

We have been researching open optical network and established a laboratory to study its compatibility issues, which contributed great value to the low cost and convenience of network construction. On the basis of open, we have gradually developed and built an innovative ecosystem, integrating a cloud programming platform (interacted with our cloud server for online coding, testing and information query), a remote firmware upgrade system, and a series of open checkers. We are also building a VIP online system to improve customers' experience.

Qualification & Certification

GIGALIGHT has successively obtained ISO 9001:2015 quality management system and ISO 14001:2015 environmental management system certification, ISO 45001 occupational health and safety management system certification, RoHS, TUV, UL, FDA and a series of product certifications.



QMS



EMS



OH&SMS



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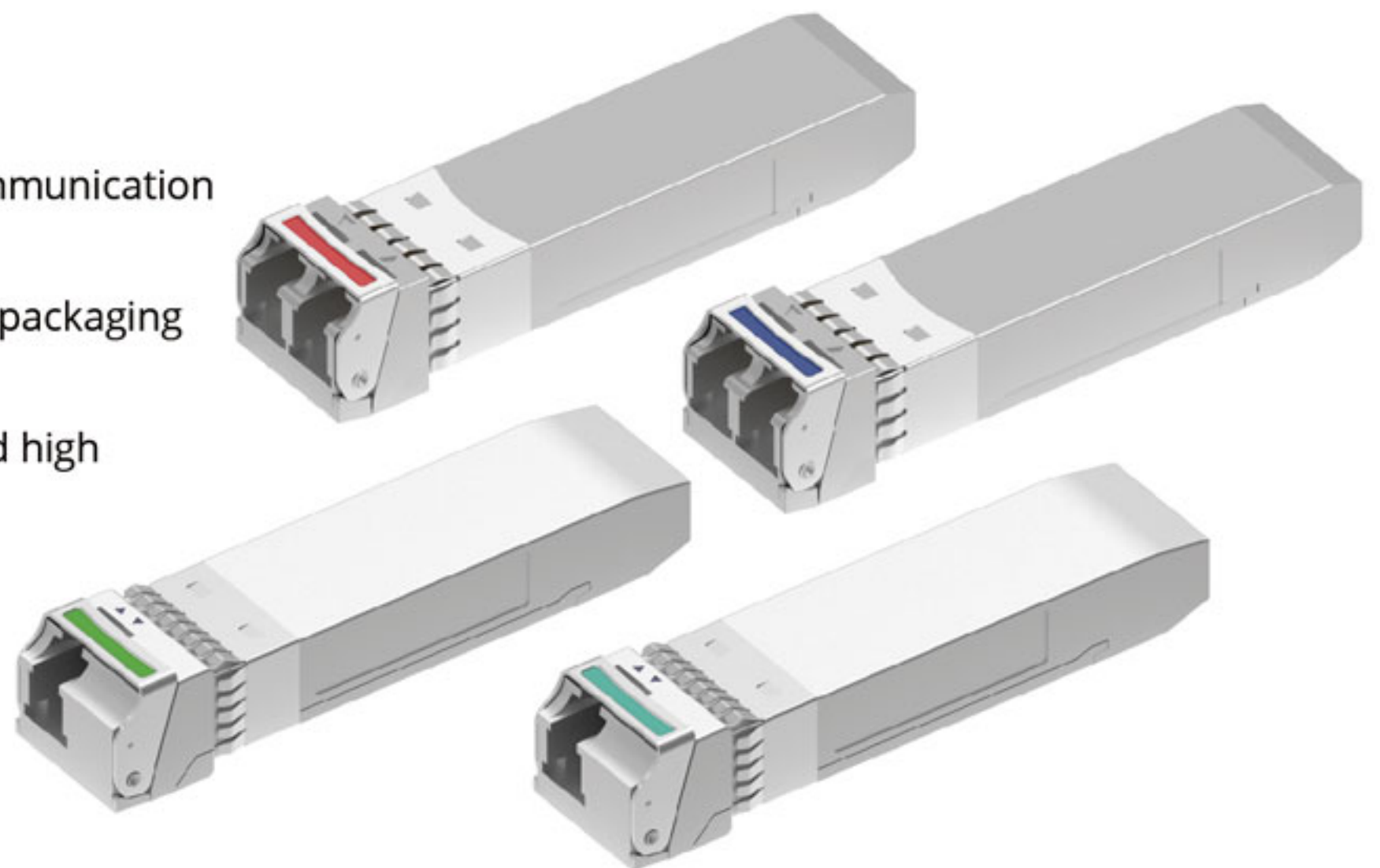
5G Fronthaul

25G SFP28 & 50G SFP56 Gray Light Transceivers

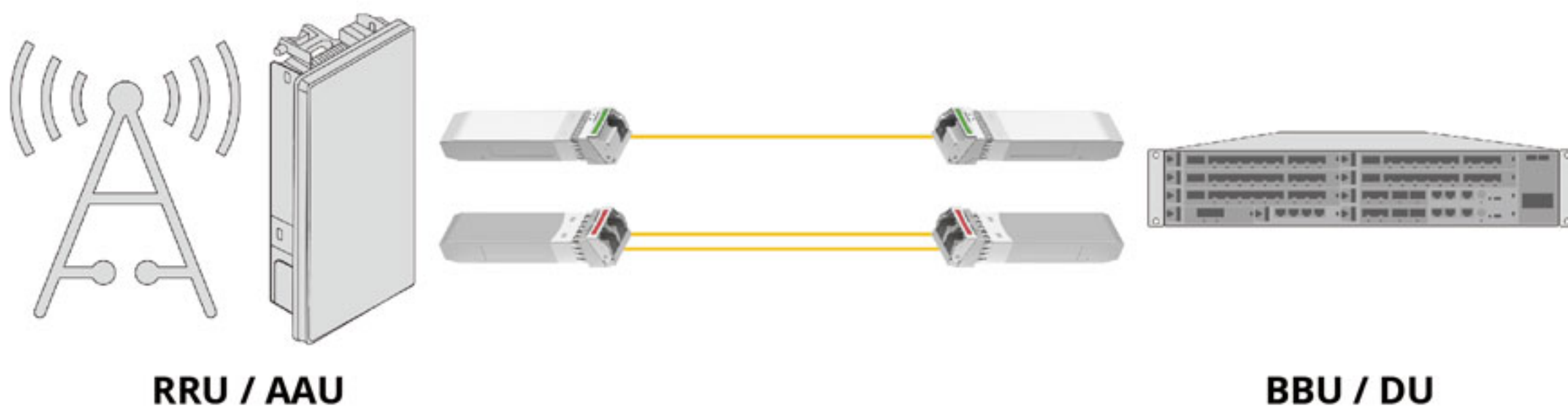
GIGALIGHT provides a full range of 25G SFP28 and 50G SFP56 gray light transceivers for scenarios where the optical fiber resources are relatively abundant in 5G fronthaul applications.

Highlights

- Support Ethernet and eCPRI to meet telecommunication requirements
- Adopt high-quality components and mature packaging technology to ensure reliable quality
- Adopt airtight package with high stability and high reliability



Application



Selection Table

Dual-Fiber Bidirectional

Images	Product Name	TX	RX	TX_Min (dBm)	TX_Max (dBm)	RX_Min (dBm)	RX_Max (dBm)	Max. Power Consumption	Reach	Temp (°C)	Part Number
	25G SFP28 SR	850nm VCSEL	PIN	-8.4	2.4	-10.3	3	1W	100m 300m	-40~+85	GSS-MPO250-SRT GSS-MPO250-CSRT
	25G SFP28 LR	1310nm DML	PIN	-7	3	-14.8	3	1.2W	10km 20km	-40~+85	GSS-SPO250-LRT GSS-SPO250-L2T
	25G SFP28 ER	1310nm EML	APD	-3	6	-23	-5	1.8W	40km	-40~+85	GSS-SPO250-ERT
	50G SFP56 SR	850nm VCSEL	PIN	-6	4	-7.9	4	2W	100m	0~70 -40~+85	GSS-MPO560-SRC GSS-MPO560-SRT
	50G SFP56 LR	1310nm EML	PIN	-4.5	4.2	-10.8	4.2	3W	10km	0~70 -40~+85	GSS-SPO500-LR1C GSS-SPO500-LR1T
	50G SFP56 ER	1310nm EML	APD	0.6	6.6	-17.6	-3.4	3W	40km	0~70 -40~+85	GSS-SPO500-ER1C GSS-SPO500-ER1T

Single-Fiber Bidirectional

Images	Product Name	TX	RX	TX_Min (dBm)	TX_Max (dBm)	RX_Min (dBm)	RX_Max (dBm)	Max. Power Consumption	Reach	Temp (°C)	Part Number
	25G SFP28 BR10-U	1270/1330nm DML	PIN	-2	6	-12	3	1.5W	10km	-40~+85	GBP-2733250-LRT
	25G SFP28 BR10-D	1330/1270nm DML	PIN	-2	6	-12	3	1.5W	10km	-40~+85	GBP-3327250-LRT
	25G SFP28 BR20-U	1270/1330nm DML	APD	-2	6	-19	-3	1.8W	20km	-40~+85	GBP-2733250-L2T
	25G SFP28 BR20-D	1330/1270nm DML	APD	-2	6	-19	-3	1.8W	20km	-40~+85	GBP-3327250-L2T
	25G SFP28 BR40-U	1270/1310nm EML	APD	-2	6	-19	-3	1.9W	40km	-40~+85	GBP-2731250-ERT
		1270/1330nm EML									GBP-2733250-ERT
	25G SFP28 BR40-D	1310/1270nm EML	APD	-2	6	-19	-3	1.9W	40km	-40~+85	GBP-3127250-ERT
		1330/1270nm EML									GBP-3327250-ERT
	50G SFP56 BR10-D	1330/1270nm EML	PIN	-4.5	4.2	-10.8	4.2	3W	10km	0~70 -40~+85	GBP-3327500-LRC GBP-3327500-LRT
	50G SFP56 BR10-U	1270/1330nm EML	PIN	-4.5	4.2	-10.8	4.2	3W	10km	0~70 -40~+85	GBP-2733500-LRC GBP-2733500-LRT
	50G SFP56 BR20-D	1330/1270nm EML	APD	-4.5	4.2	-10.8	4.2	3W	20km	0~70 -40~+85	GBP-3327500-L2C GBP-3327500-L2T
	50G SFP56 BR20-U	1270/1330nm EML	APD	-4.5	4.2	-10.8	4.2	3W	20km	0~70 -40~+85	GBP-2733500-L2C GBP-2733500-L2T

5G Fronthaul

100G QSFP28 & 200G QSFP-DD Parallel Transceivers

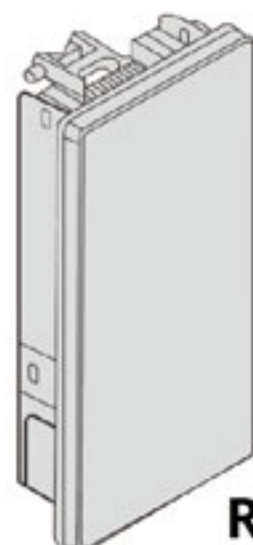
GIGALIGHT provides a full range of 100G QSFP28 and 200G QSFP-DD parallel transceivers for scenarios where the optical fiber resources are relatively abundant in 5G fronthaul applications.

Highlights

- Support Ethernet and eCPRI to meet telecommunication requirements
- Adopt high-quality components and mature packaging technology to ensure reliable quality
- Adopt airtight package with high stability and high reliability



Application



4/8× 25G SFP28 LR



RRU / AAU

100G QSFP28 PSM4
200G QSFP-DD PSM8



BBU / DU

Selection Table

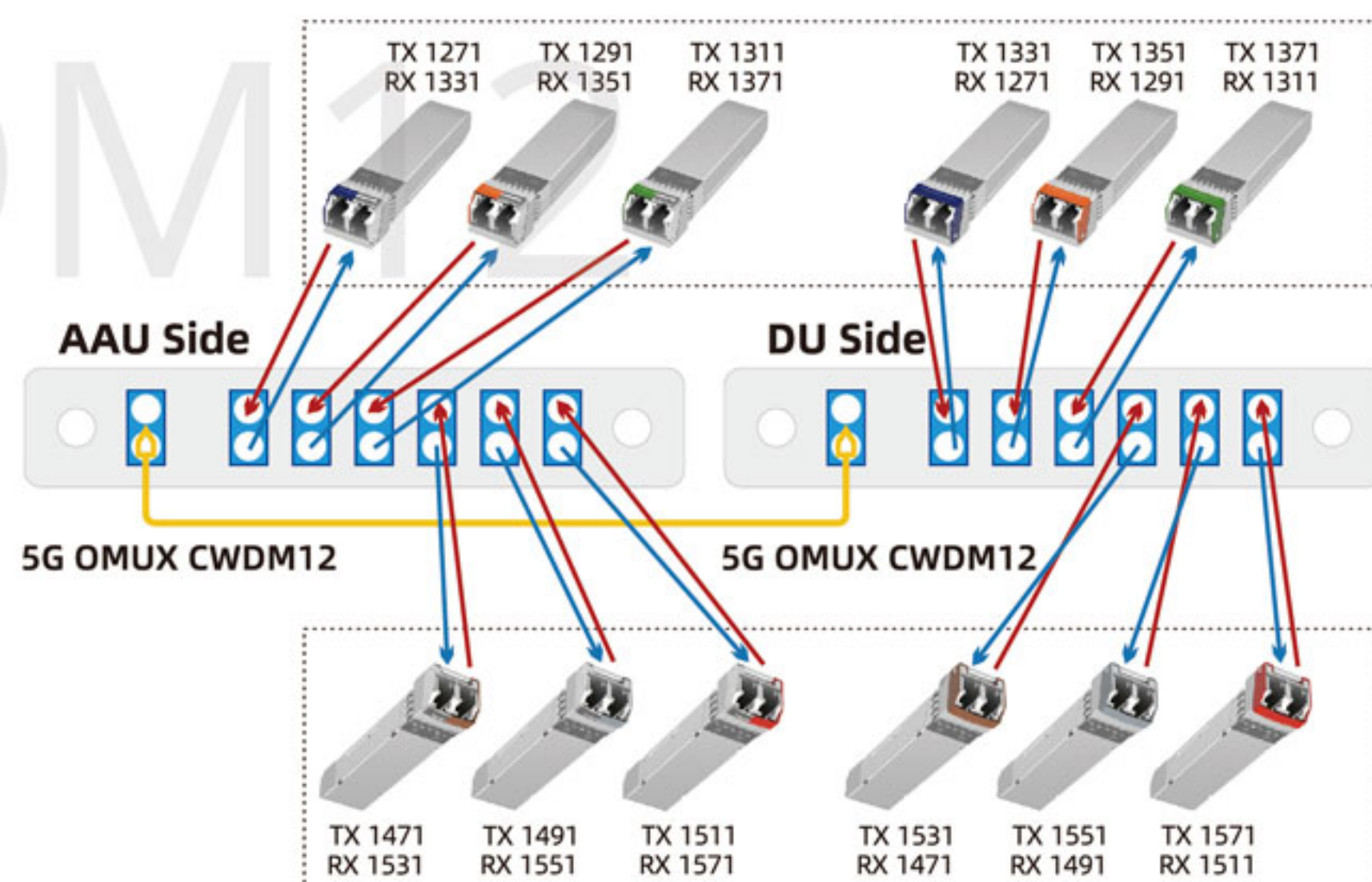
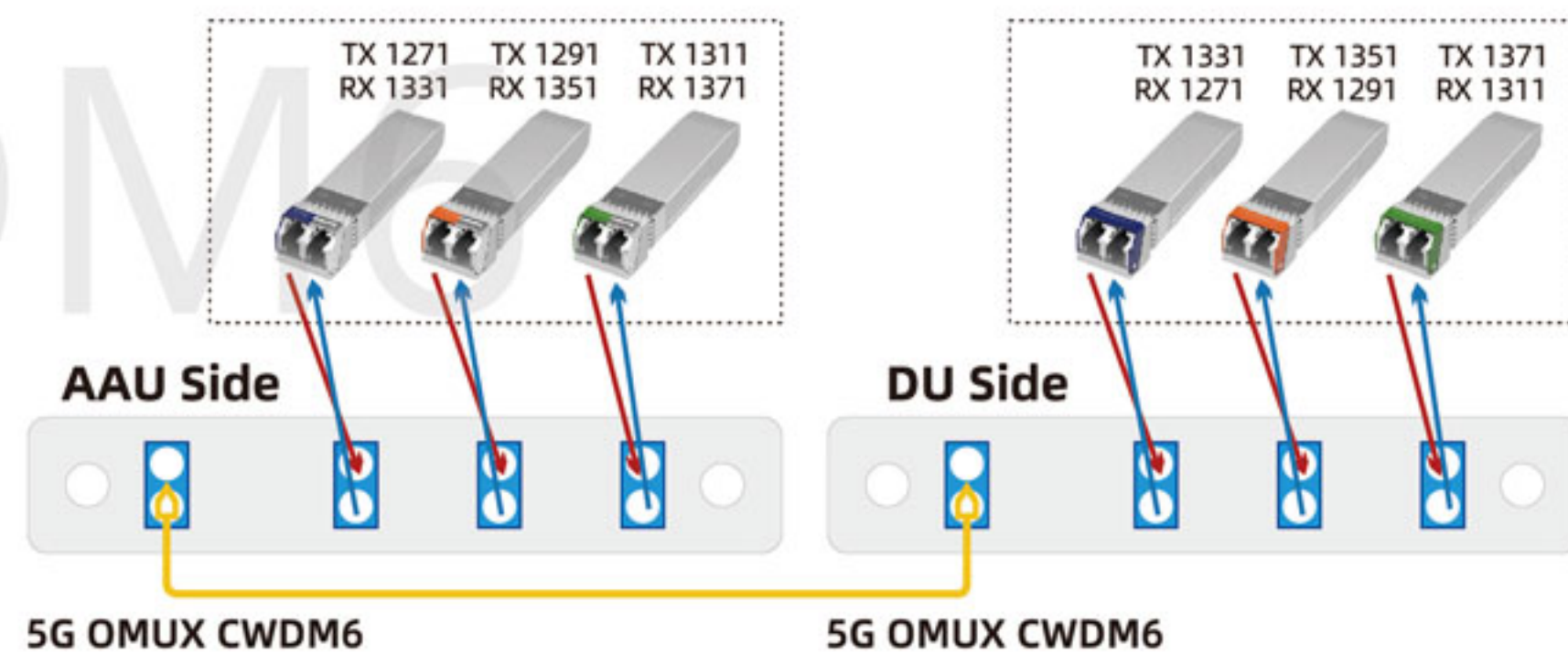
Images	Product Name	TX	RX	TX_Min (dBm)	TX_Max (dBm)	RX_Min (dBm)	RX_Max (dBm)	Max. Power Consumption	Reach	Temp (°C)	Part Number
	100G QSFP28 SR4	850nm VCSEL	PIN	-8.4	2.4	-10.3	2.4	2W	100m	0~70 -40~+85	GQS-MPO101-SR4C GQS-MPO101-SR4T
	100G QSFP28 eSR4	850nm VCSEL	PIN	-8.4	2.4	-10.3	2.4	2W	300m	0~70 -40~+85	GQS-MPO101-eSR4C GQS-MPO101-eSR4T
	100G QSFP28 PSM4	1310nm DML	PIN	-9.4	2	-12.66	2	3.5W	2km	0~70 -40~+85	GQM-SPO101-IR4C GQM-SPO101-IR4T
	100G QSFP28 PSM-LR4	1310nm DML	PIN	-9.4	2	-12.66	2	3.5W	10km	0~70 -40~+85	GQM-SPO101-LR4C GQM-SPO101-LR4T
	200G QSFP-DD SR8	850nm VCSEL	PIN	-8.4	2.4	-10.3	2.4	4W	100m	0~70 -40~+85	GQD-MPO201-DSR4C GQD-MPO201-DSR4T
	200G QSFP-DD PSM8	1310nm DML	PIN	-9.4	2	-12.66	2	6W	2km	0~70 -40~+85	GDM-SPO201-FR8C GDM-SPO201-FR8T
	200G QSFP-DD PSM-LR8	1310nm DML	PIN	-9.4	2	-12.66	2	6.5W	10km	0~70 -40~+85	GDM-SPO201-LR8C GDM-SPO201-LR8T

5G Fronthaul

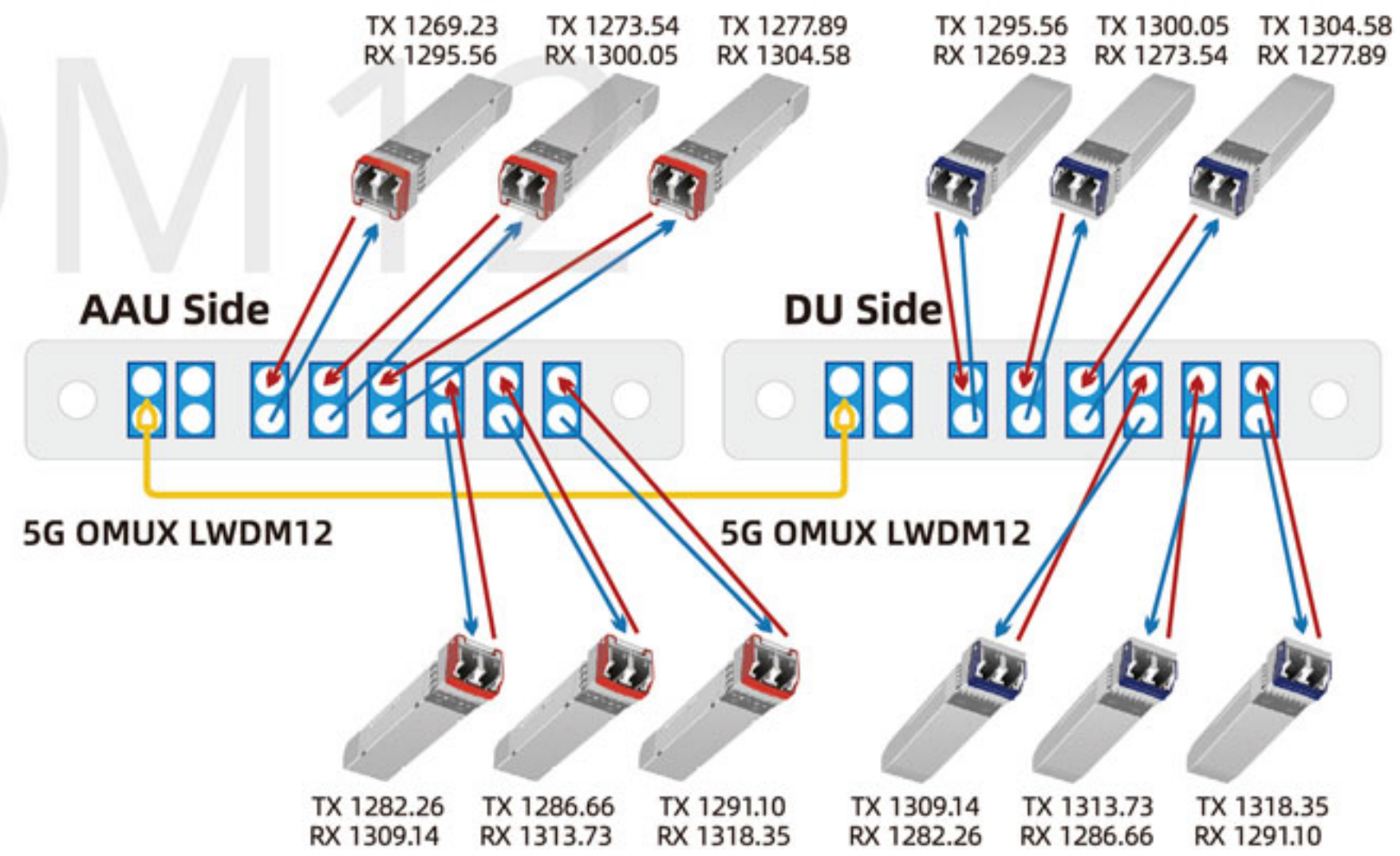
25G SFP28 & 50G SFP56 Color Light Transceivers

GIGALIGHT provides a full range of 25G SFP28 and 50G SFP56 color light transceivers for scenarios where the optical fiber resources are relatively scarce in 5G fronthaul applications.

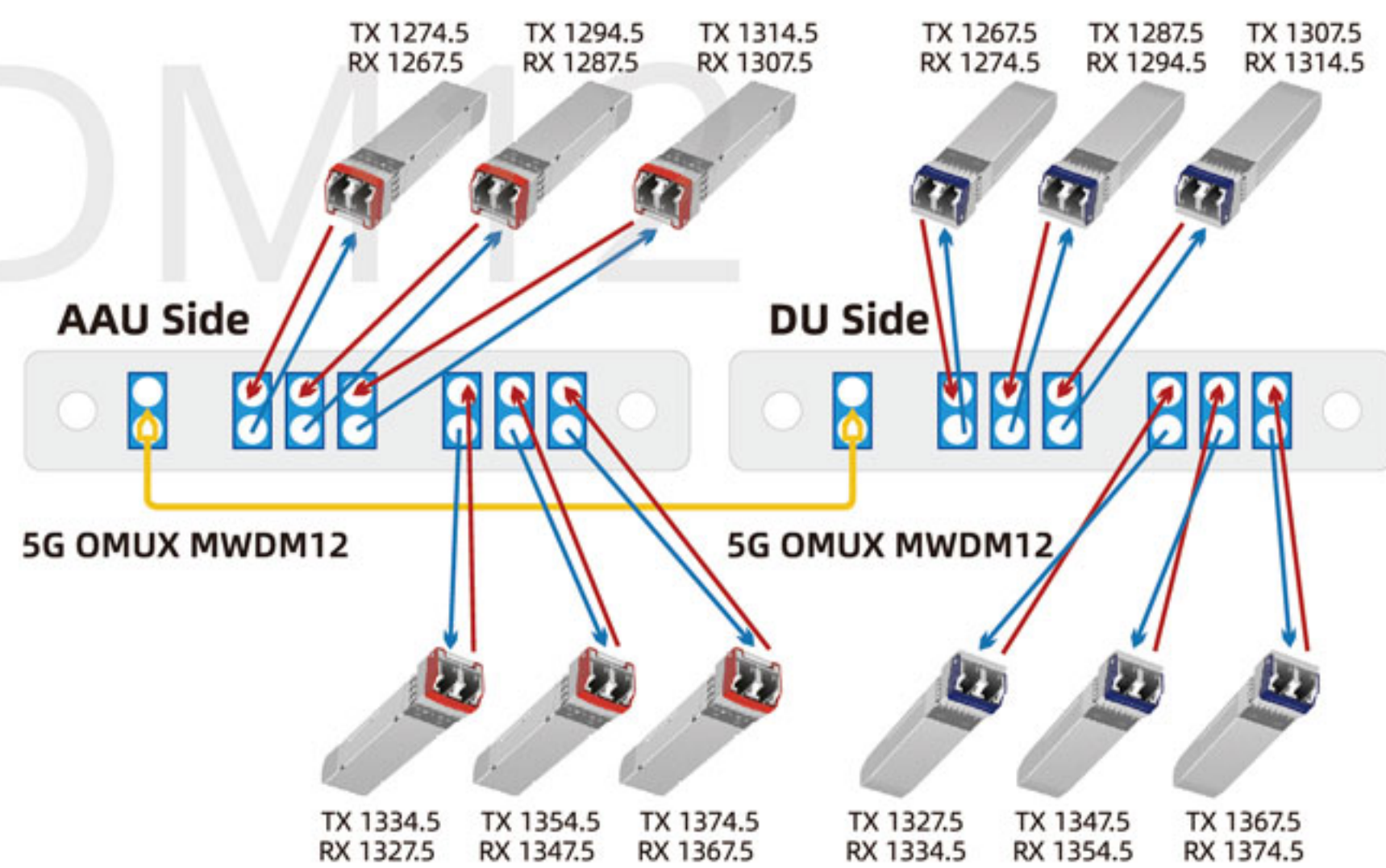
Application



LWDM



MWDM



Selection Table

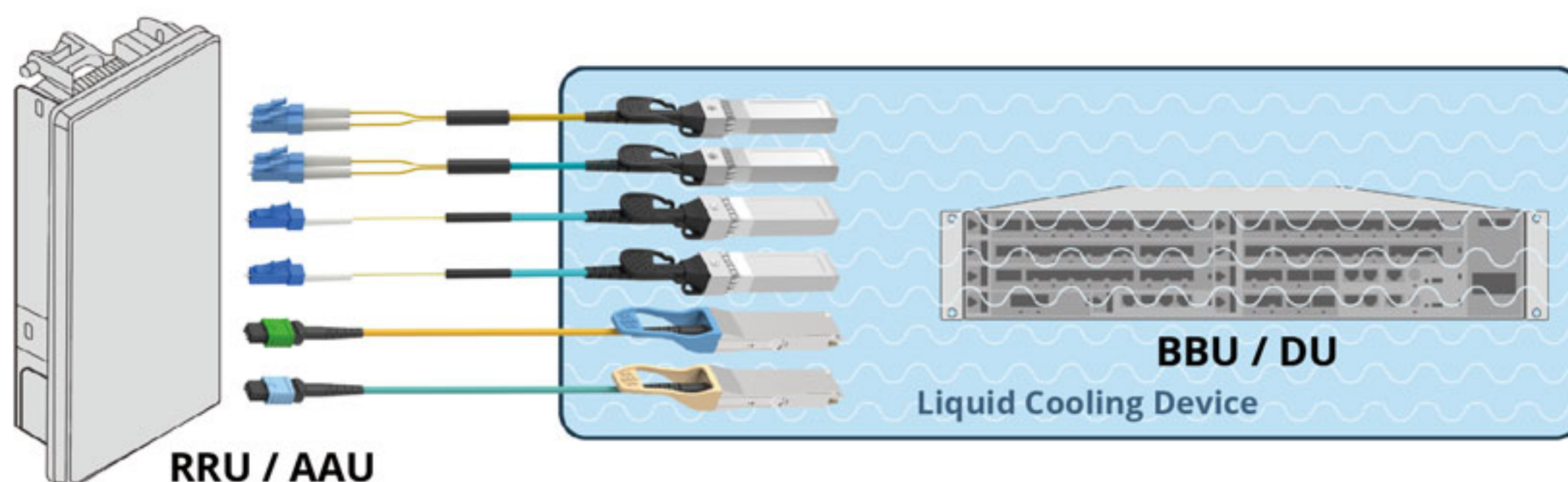
Images	Product Name	TX	RX	TX_Min (dBm)	TX_Max (dBm)	RX_Min (dBm)	RX_Max (dBm)	Max. Power Consumption	Reach	Temp (°C)	Part Number
	10G SFP+ CWDM	1271~1391nm DML	PIN	-8.2	2	-14.4	0.5	1.5W	10km	-40~+85	GCP-xx192-01T
		1271~1571nm DML	APD	-2	3	-20	-6	1.5W	10km		GCP-xx192-01T
		1471~1611nm EML	APD	0	4	-24	-5	1.8W	40km		GCP-xx192-04T
	10G SFP+ DWDM	C18~C61 EML	APD	0	4	-24	-5	2W	40km	-40~+85	GDP-xx192-04T
									70km		GDP-xx192-07T
	25G SFP28 CWDM	1271~1371nm DML	PIN	-2	6	-14	2	1.8W	10km	-40~+85	GSS-Cxx250-LRT
		1471~1571nm EML	APD	-2	2	-18	-6		10km		GSS-Cxx250-LRT
		1271~1371nm DML	APD	-1	5	-24	-6		15km		GSS-Cxx250-LST
	25G SFP28 LWDM	1269.23~1318.35nm DML	PIN	-1	7	-14	2	1.5W	10km	-40~+85	GSS-Sxx250-LRT
		1269.23~1318.35nm DML	APD	-1	7	-19	4	1.8W	20km		GSS-Sxx250-L2T
		1273.55~1309.14nm EML	APD	-3	6	-27	-5	2W	40km		GSS-Sxx250-ERT
	25G SFP28 MWDM	1267.5~1374.5nm DML	PIN	2	7	-13	2	2W	10km	-40~+85	GSS-Mxx250-LRT
			APD	2	7	-18	-4		20km		GSS-Mxx250-L2T
	25G SFP28 DWDM	C18~C61 EML	PIN	-	-	-	-	1.8W	2km	-40~+85	GSS-Dxx250-02T
			APD	0	4	-27	-5	2W	10km		GSS-Dxx250-LRT
	50G SFP56 DWDM	C18~C61 EML	APD	0.6	6.6	-17.6	-3.4	3W	6km	0~70 -40~+85	GSS-Dxx500-06C
											GSS-Dxx500-06T

5G Fronthaul

25G SFP28 & 100G QSFP28 Immersible Transceiver Assemblies

GIGALIGHT provides a full range of 25G SFP28 & 100G QSFP28 immersible transceiver assemblies for scenarios with high heat dissipation requirements and immersion liquid-cooling technology in 5G fronthaul applications. These products are compatible with fluorinated fluids and mineral oils, and remain highly reliable even at submersion depths of up to 10 meters.

Application



Selection Table

Images	Product Name	TX	RX	TX_Min (dBm)	TX_Max (dBm)	RX_Min (dBm)	RX_Max (dBm)	Max. Power Consumption	Reach	Temp (°C)	Part Number
	Immersible 25G SFP28 SR	850nm VCSEL	PIN	-8.4	2.4	-10.3	3	1W	100m	0~60	GL-S250SR-xxx
	Immersible 25G SFP28 LR	1310nm DML	PIN	-7	2	-13.3	2	1.5W	10km	0~60	GL-S250LR-xxx
	Immersible 25G SFP28 BiDi LR	1270/1330nm DML	PIN	-7	2	-13.3	2	1.5W	10km	0~60	TBD
	Immersible 25G SFP28 BiDi LR	1330/1270nm DML	PIN	-7	2	-13.3	2	1.5W	10km	0~60	TBD
	Immersible 100G QSFP28 SR4	850nm VCSEL	PIN	-8.4	2.4	-10.3	2.4	2W	100m	0~60	GL-Q101-SR4-Mxx
	Immersible 100G QSFP28 PSM4	1310nm DML	PIN	-9.4	2	-12.66	2	3.5W	2km 10km	0~60	GL-Q101-PSM4-Mxx

5G Fronthaul

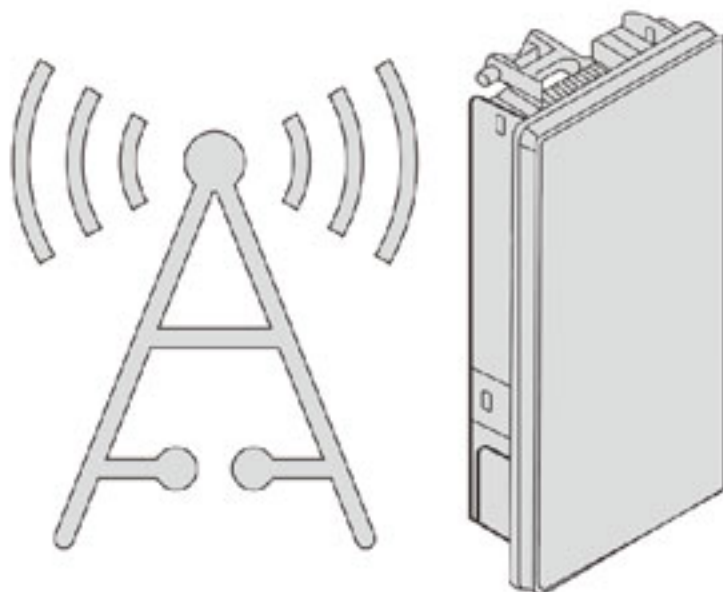
10G SFP+, 25G SFP28 & 100G QSFP28 HAOC Assemblies

GIGALIGHT provides a full range of 10G SFP+, 25G SFP28 & 100G QSFP28 Hardened Active Optical Cable (HAOC) assemblies for scenarios with high requirements for waterproof, dustproof and anti-interference in 5G fronthaul applications.

Highlights

- Armored optical cable, sturdy and reliable
- Support Ethernet and eCPRI to meet telecommunication requirements
- Adopt high-quality components and mature packaging technology to ensure reliable quality
- Adopt airtight package with high stability and high reliability

Application



RRU / AAU



BBU / DU

Selection Table

Images	Product Name	Fiber Type	Length (Customizable)	Form Factor	TX	RX	Max. Power Consumption	Temp (°C)	Part Number
	10G SFP+ HAOC	MMF	1m~400m	SFP+ SFP+	850nm VCSEL	PIN	0.8W / 0.8W	-40~+85	GSS-MDO100-xxxT
	25G SFP28 HAOC	MMF	1m~100m/300m	SFP28 SFP28	850nm VCSEL	PIN	1W / 1W	-40~+85	GSS-MDO250-xxxT
	100G QSFP28 HAOC	MMF	1m~100m/300m	QSFP28 QSFP28	850nm VCSEL	PIN	2W / 2W	-40~+85	GQS-MDO101-xxxT
	100G QSFP28 to 4x 25G SFP28 HAOC	MMF	1m~100m	QSFP28 4xSFP28	850nm VCSEL	PIN	2W / 4x1W	-40~+85	GQP-MDO101-xxxT

5G Backhaul & Metro Telecom

100G / 200G / 400G Optical Transceivers

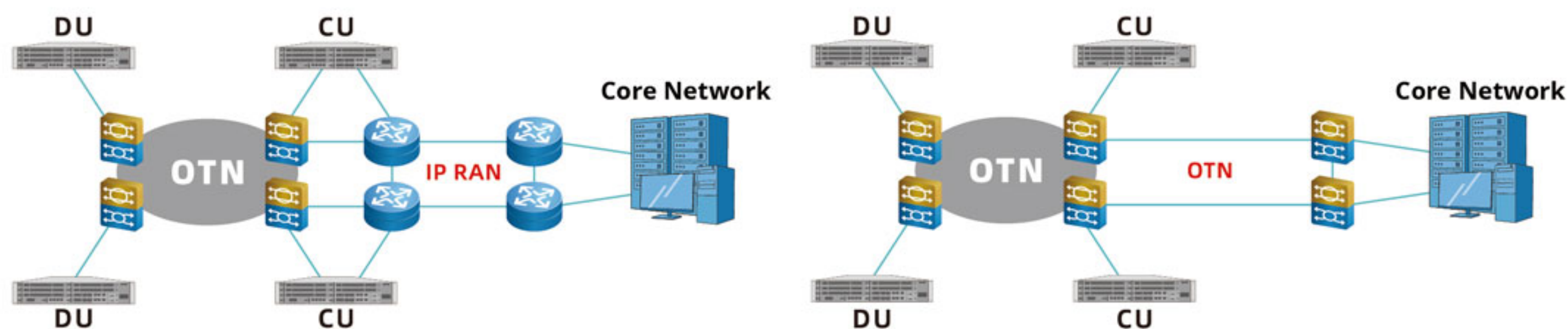
GIGALIGHT provides a full range of 100G, 200G and 400G optical transceivers for the optical transport network of 5G backhaul and metro telecom applications. These products not only support various kinds of optical network architectures, but also are compatible with mainstream optical transport platforms, completely eliminating worries for global telecom operators.

Highlights

- Support OTN OTU4/OTUC2/OTUC4
- Zero bit error rate
- Excellent signal integrity



Application



Selection Table

100G QSFP28/SFP-DD Single-channel Transceivers

Images	Product Name	TX	RX	TX_Min (dBm)	TX_Max (dBm)	RX_Min (dBm)	RX_Max (dBm)	Max. Power Consumption	Reach	Temp (°C)	Part Number
	100G QSFP28 LR1	1310nm EML	PIN	-0.2	6.6	-10	6.6	4W	20km	0~70	GQS-SPO101-LR1C
	100G QSFP28 ER1	1310nm EML	APD	1.7	7.1	-16	-3.4	4W	40km	0~70	GQS-SPO101-ER1C
	100G SFP-DD FR1	1310nm EML	PIN	-3.1	4	-7.1	4	4W	2km	0~70	GSD-SPO101-FR1C
	100G SFP-DD LR1	1310nm EML	PIN	-0.2	6.6	-10	6.6	4W	10km	0~70	GSD-SPO101-LR1C

100G CFP/CFP2/CFP4/QSFP28 Multi-channel Transceivers

Images	Product Name	TX	RX	TX_Min (dBm)	TX_Max (dBm)	RX_Min (dBm)	RX_Max (dBm)	Max. Power Consumption	Reach	Temp (°C)	Part Number
	100G CFP SR10	850nm VCSEL	PIN	-7.6	2.4	-9.5	2.4	7W	400m	0~70	GCF-M101-CSR10C
	100G CFP LR4	EML LWDM4	PIN	-4.3	4.5	-10.6	4.5	9W	10km	0~70	GCF-S101-LR4C
	100G CFP transfer QSFP28 Adapter	N/A	N/A	N/A	N/A	N/A	N/A	5W	N/A	0~70	GCF-QSFP28-101-x
	100G CFP2 SR10	850nm VCSEL	PIN	-7.6	2.4	-9.5	2.4	8W	400m	0~70	GF2-M101-SR10C
	100G CFP2 LR4	EML LWDM4	PIN	-4.3	4.5	-10.6	4.5	6W	10km	0~70	GF2-S101-LR4C
	100G CFP2 ER4	EML LWDM4	APD+SOA	-2.9	2.9	-20.9	4.5	9W	40km	0~70	GF2-S101-ER4C
	100G CFP2 transfer QSFP28 Adapter	N/A	N/A	N/A	N/A	N/A	N/A	2W	N/A	0~70	GF2-QSFP28-101-N
	100G CFP4 SR4	850nm VCSEL	PIN	-8.4	2.4	-10.3	2.4	2.5W	100m	0~70	F4-M101-SR4C
	100G CFP4 LR4	EML LWDM4	PIN	-4.3	4.5	-10.6	4.5	4W	10km	0~70	GF4-S101-LR4C
	100G QSFP28 LR4	DML LWDM4	PIN	-4.3	4.5	-10.6	4.5	3.5W	10km 20km	0~70	GQS-SPO111-LR4C GQS-SPO111-L24C
	100G QSFP28 ER4 Lite	DML LWDM4	APD	-2.5	6.5	-20.5	-7	3.8W	30km 40km	0~70	GQS-SPO111-ES4C
	100G QSFP28 ER4	EML LWDM4	PIN+SOA	-2.9	2.9	-23.2	-3.5	6W	40km	0~70	GQS-SPO111-ER4C
	100G QSFP28 eER4	EML LWDM4	PIN+SOA	-2.9	2.9	-23.2	-3.5	6W	60km	0~70	GQS-SPO111-eER4C
	100G QSFP28 ZR4	EML LWDM4	PIN+SOA	0	4.5	-28	-3.5	6W	90km	0~70	GQS-SPO111-ZR4C

200G QSFP56/QSFP-DD Multi-channel Transceivers

Images	Product Name	TX	RX	TX_Min (dBm)	TX_Max (dBm)	RX_Min (dBm)	RX_Max (dBm)	Max. Power Consumption	Reach	Temp (°C)	Part Number
	200G QSFP-DD LR8	DML LWDM8	PIN	-4.3	4.5	-10.6	4.5	7.5W	10km 20km	0~70	GQD-SPO201-LR8C
	200G QSFP-DD FR4	EML CWDM4	PIN	-4.2	4.7	-8.2	4.7	7.5W	2km	0~70	GQD-SPO201-FR4C
	200G QSFP-DD LR4	EML LWDM4	PIN	-3.4	5.3	-9.7	5.3	7.5W	10km 20km	0~70	GQD-SPO201-LR4C
	200G QSFP-DD ER4	EML LWDM4	APD	0.4	6.6	-17.6	-3.4	7W	40km	0~70	GQD-SPO201-ER4C
	200G QSFP56 FR4	EML CWDM4	PIN	-4.2	4.7	-8.2	4.7	7.5W	2km	0~70	GQS-SPO201-FR4C
	200G QSFP56 LR4	EML LWDM4	PIN	-3.4	5.3	-9.7	5.3	7.5W	10km 20km	0~70	GQS-SPO201-LR4C
	200G QSFP56 ER4	EML LWDM4	APD	0.4	6.6	-17.6	-3.4	7W	40km	0~70	GQS-SPO201-ER4C

400G QSFP-DD Multi-channel Transceivers

Images	Product Name	TX	RX	TX_Min (dBm)	TX_Max (dBm)	RX_Min (dBm)	RX_Max (dBm)	Max. Power Consumption	Reach	Temp (°C)	Part Number
	400G QSFP-DD FR8	EML LWDM8	PIN	-2.8	5.3	-9.1	5.3	12.5W	2km	0~70	GQD-SPO401-FR8C
	400G QSFP-DD LR8	EML LWDM8	PIN	-2.8	5.3	-9.1	5.3	12.5W	10km	0~70	GQD-SPO401-LR8C

5G Fronthaul & Metro Telecom

xWDM OMUX / AAWG

GIGALIGHT provides a full range of 5G OMUX & DWDM MUX DEMUX passive modules for scenarios where the optical fiber resources are relatively scarce in 5G fronthaul applications. These passive modules are based on the Thin-Film-Filter (TFF) technology and feature ultra-low insertion loss, ultra-high thermal stability and unparalleled reliability. They are used with GIGALIGHT's color light transceivers to build 5G fronthaul networks based on different types of Wavelength Division Multiplexing (WDM) technologies.

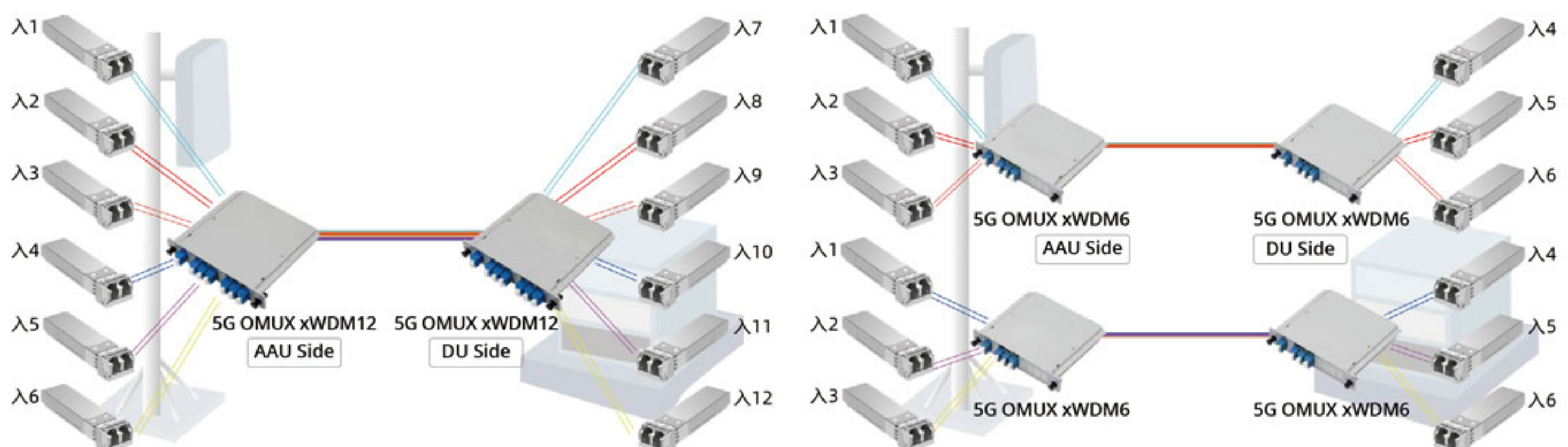
5G OMUX

Highlights

- Support CWDM/MWDM/LWDM/DWDM single-fiber bidirectional transmission
- Low insertion loss, high isolation, and polarization dependent loss
- Good channel insertion loss uniformity
- Blade module, LGX cassette and other packaging types optional
- -40°C to +85°C industrial operating temperature range
- Ultra-high reliability and thermal stability



Application



Parameters

Product Series	Center Wavelength Deviation (nm)	Passband Width @1dB (nm)	Passband Flatness (dB)	Adjacent Channel Isolation (dB)	Non-adjacent Channel Isolation (dB)	Wavelength Thermal Stability (nm/°C)	Insertion Loss Thermal Stability (dB/°C)	Polarization Dependent Loss (dB)	Return Loss (dB)	Operating Temperature Range (°C)	Storage Temperature Range (°C)
CWDM6/12	≤1.5	≥13	≤0.5	≥25	≥30	≤0.002	≤0.007	≤0.15	≥40	-40~85	-40~85
LWDM6/12	≤0.5	≥2.3	≤0.5	≥25	≥30	≤0.002	≤0.007	≤0.15	≥40	-40~85	-40~85
MWDM6/12	≤1.0	≥5.0	≤0.5	≥25	≥30	≤0.002	≤0.007	≤0.15	≥40	-40~85	-40~85
DWDM6/12	≤0.11	≥0.22 (@0.5dB)	≤0.5	≥30	≥45	≤0.002	≤0.007	≤0.15	≥50	-40~85	-40~85

Selection Table

Product Name	5G OMUX CWDM6 RT						5G OMUX CWDM6 COT			
Part Number	GF5GC6R						GF5GC6C			
TX Center Wavelength (nm)	1271	1291	1311	1331	1351	1371				
TX Max. Channel Insertion Loss (dB)	1.5	1.5	1.5	1.0	0.6	0.9				
RX Center Wavelength (nm)	1331	1351	1371	1271	1291	1311				
RX Max. Channel Insertion Loss (dB)	1.0	0.9	0.6	1.5	1.5	1.5				

Product Name	5G OMUX CWDM12 RT						5G OMUX CWDM12 COT					
Part Number	GF5GC12R						GF5GC12C					
TX Center Wavelength (nm)	1271	1291	1311	1471	1491	1511	1331	1351	1371	1531	1551	1571
TX Max. Channel Insertion Loss (dB)	1.5	1.5	1.5	2.5	2.5	2.5	1.0	0.6	0.9	2.5	2.5	2.5
RX Center Wavelength (nm)	1331	1351	1371	1531	1551	1571	1271	1291	1311	1471	1491	1511
RX Max. Channel Insertion Loss (dB)	1.0	0.9	0.6	2.5	2.5	2.5	1.5	1.5	1.5	2.5	2.5	2.5

Product Name	5G OMUX LWDM6 RT			5G OMUX LWDM6 COT		
Part Number	GF5GL6R			GF5GL6C		
TX Center Wavelength (nm)	1269.23	1273.54	1277.89	1282.26	1286.66	1291.10
TX Link Loss (dB)	≤3.5			≤3.5		
RX Center Wavelength (nm)	1282.26	1286.66	1291.10	1269.23	1273.54	1277.89
RX Link Loss (dB)	≤3.5			≤3.5		

Product Name	5G OMUX LWDM12 RT						5G OMUX LWDM12 COT					
Part Number	GF5GL12R						GF5GL12C					
TX Center Wavelength (nm)	1269.23	1273.54	1277.89	1282.26	1286.66	1291.10	1295.56	1300.05	1304.58	1309.14	1313.73	1318.35
TX Link Loss (dB)	≤4.5						≤4.5					
RX Center Wavelength (nm)	1295.56	1300.05	1304.58	1309.14	1313.73	1318.35	1269.23	1273.54	1277.89	1282.26	1286.66	1291.10
RX Link Loss (dB)	≤4.5						≤4.5					

Product Name	5G OMUX MWDM6 RT			5G OMUX MWDM6 COT		
Part Number	GF5GM6R			GF5GM6C		
TX Center Wavelength (nm)	1274.5	1294.5	1314.5	1267.5	1287.5	1307.5
TX Link Loss (dB)	1.2	1.7	2.2	2.2	1.7	1.2
RX Center Wavelength (nm)	1267.5	1287.5	1307.5	1274.5	1294.5	1314.5
RX Link Loss (dB)	1.0	1.5	2.0	2.0	1.5	1.0

Product Name	5G OMUX MWDM12 RT						5G OMUX MWDM12 COT					
Part Number	GF5GM12R						GF5GM12C					
TX Center Wavelength (nm)	1274.5	1294.5	1314.5	1334.5	1354.5	1374.5	1267.5	1287.5	1307.5	1327.5	1347.5	1367.5
TX Link Loss (dB)	2.8	2.6	2.4	2.0	1.2	1.0	2.8	2.6	2.4	2.0	1.2	1.0
RX Center Wavelength (nm)	1267.5	1287.5	1307.5	1327.5	1347.5	1367.5	1274.5	1294.5	1314.5	1334.5	1354.5	1374.5
RX Link Loss (dB)	3.0	3.2	3.4	2.2	1.5	1.7	3.0	3.2	3.4	2.2	1.5	1.7

Product Name	5G OMUX DWDM6 RT				5G OMUX DWDM6 COT			
Part Number	GF5GD6R				GF5GD6C			
TX Center Wavelength (nm)	C38	C39	C40	C43	C42	C41		
TX Max. Channel Insertion Loss (dB)	1.7	1.9	2.0	1.7	1.9	2.0		
RX Center Wavelength (nm)	C43	C42	C41	C38	C39	C40		
RX Max. Channel Insertion Loss (dB)	2.4	2.2	2.1	2.4	2.2	2.1		

Product Name	5G OMUX DWDM12 RT						5G OMUX DWDM12 COT					
Part Number	GF5GD12R						GF5GD12C					
TX Center Wavelength (nm)	C26	C27	C28	C29	C30	C31	C37	C36	C35	C34	C33	C32
TX Max. Channel Insertion Loss (dB)	1.8	1.8	2.0	2.2	2.4	2.5	1.8	1.8	2.0	2.2	2.4	2.5
RX Center Wavelength (nm)	C37	C36	C35	C34	C33	C32	C26	C27	C28	C29	C30	C31
RX Max. Channel Insertion Loss (dB)	2.7	2.7	2.5	2.3	2.1	2.0	2.7	2.7	2.5	2.3	2.1	2.0

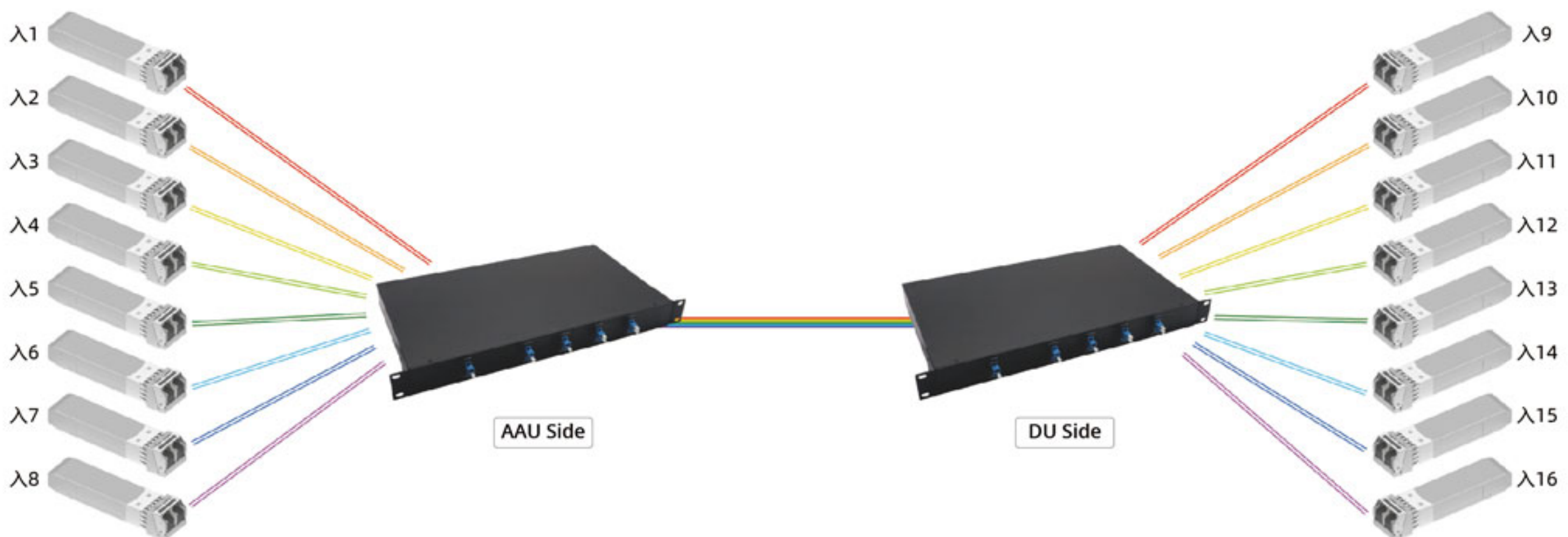
DWDM MUX / DEMUX (TFF)

Highlights

- Compliant with ITU-T G.694.1
- Up to 16 channels optional (CH15 to CH64)
- Low insertion loss with excellent channel uniformity
- High isolation and low polarization loss
- High reliability and thermal stability
- ABS box, LGX cassette and 1U 19" Rack Mount optional
- Industrial operating temperature range from -40 to +85°C



Application



Parameters

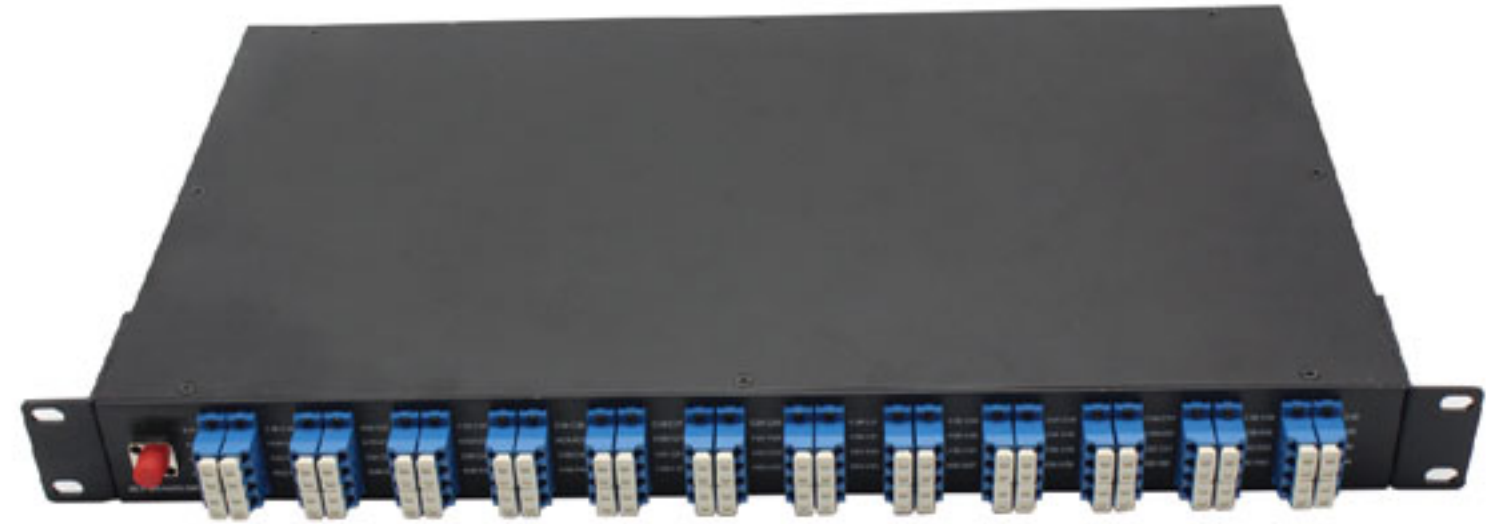
Part Number	Product Description	Channel Insertion Loss (dB)	MUX+DEMUX Link Insertion Loss (dB)	Adjacent Channel Isolation (dB)	Non-adjacent Channel Isolation (dB)	Polarization Dependent Loss (dB)	Return Loss (dB)
GFDWx2	2CH DWDM	≤1.5dB	≤2.7dB	≥30dB	≥45dB	≤0.2dB	≥45dB
GFDWx4	4CH DWDM	≤1.8dB	≤3.0dB	≥30dB	≥45dB	≤0.2dB	≥45dB
GFDWx8	8CH DWDM	≤2.6dB	≤3.8dB	≥30dB	≥45dB	≤0.2dB	≥45dB
GFDWx16	16CH DWDM	≤4.2dB	≤5.4dB	≥30dB	≥45dB	≤0.2dB	≥45dB

Industrial DWDM AAWG

GIGALIGHT's AAWG (Athermal Arrayed Waveguide Grating) is a series of MUX DEMUX products manufactured based on planar waveguide technology that supports a larger number of channels than MUX DEMUX products manufactured based on TFF technology.

Highlights

- Support small form factors, easy to integrate, and save installation space
- Low insertion loss
- Low polarization dependent loss
- High isolation
- High reliability and thermal stability
- Good channel uniformity
- Operating temperature -40 to 85°C



1U 19" Rack Mount AAWG



Mini Module AAWG



Standard Module AAWG

Parameters

Product Description	Channel Insertion Loss (dB)	Adjacent Channel Isolation (dB)	Non-adjacent Channel Isolation (dB)	Polarization Dependent Loss (dB)	Return Loss (dB)
17CH Gaussian 150GHzO-band AAWG	≤ 3.0dB	≥ 27dB	≥ 30dB	≤ 0.5dB	≥ 40dB
32CH Gaussian 100GHzC-band AAWG	≤ 4.0dB	≥ 26dB	≥ 26dB	≤ 0.7dB	≥ 40dB
32CH Flat-top 100GHzC-band AAWG	≤ 6.5dB	≥ 23dB	≥ 26dB	≤ 0.5dB	≥ 40dB
40CH Gaussian 100GHzC-band AAWG	≤ 4.0dB	≥ 26dB	≥ 26dB	≤ 0.7dB	≥ 40dB
40CH Flat-top 100GHzC-band AAWG	≤ 6.5dB	≥ 23dB	≥ 26dB	≤ 0.5dB	≥ 40dB
48CH Gaussian 100GHzC-band AAWG	≤ 4.0dB	≥ 26dB	≥ 26dB	≤ 0.7dB	≥ 40dB
48CH Flat-top 100GHzC-band AAWG	≤ 6.5dB	≥ 23dB	≥ 26dB	≤ 0.5dB	≥ 40dB
64CH Flat-top 75GHzC-band AAWG	≤ 6.5dB	≥ 27dB	≥ 30dB	≤ 0.5dB	≥ 40dB
80CH Flat-top 50GHzC-band AAWG	≤ 7.0dB	≥ 27dB	≥ 30dB	≤ 0.5dB	≥ 40dB
96CH Flat-top 50GHzC-band AAWG	≤ 7.0dB	≥ 27dB	≥ 30dB	≤ 0.5dB	≥ 40dB

Available Parameter:

Other Available Ports: 1310nm、MON

Fiber Length: 1.0m、1.5m、2.0m、2.5m

Connector/Adapter Type: n/a、LC/UPC、LC/APC、SC/UPC、SC/APC、FC/UPC、FC/APC

VN: YFY-5GSC-220516



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