



High-Speed Interconnect Solutions for AI Data Center

Empowering AI. Connecting the Future.



In today's AI-driven, cloud-scale landscape, the demand for high-bandwidth, low-latency, and energy-efficient connectivity has never been greater. To meet these evolving infrastructure needs, **ACON OPTICS** presents a comprehensive portfolio of **high-speed interconnect solutions**, including **optical transceivers**, **active optical cables (AOCs)**, **active electrical cables (AECs)**, **active copper cables (ACCs)**, and **direct attach cables (DACs)**.

This catalogue highlights our latest innovations across transmission speeds of **1.6T, 800G, 400G, 200G, and 100G**, purpose-built for performance-intensive environments such as **AI data centers**, **high-performance computing (HPC)**, **telecommunications**, and **cloud networks**.

From long-reach optical links to short-reach copper and electrical solutions, ACON OPTICS delivers the performance, flexibility, and scalability required for next-generation connectivity.

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Next-Gen Optical Transceivers

Empowering AI with Optical Connectivity

The surge of AI and data-intensive workloads demands ultra-fast, energy-efficient connectivity. **ACON OPTICS' 1.6T, 800G, and 400G optical transceiver series** are engineered to meet the rigorous bandwidth and performance requirements of next-generation data centers. Leveraging 200G/lane silicon photonics and cutting-edge PAM4 technology, our 1.6T OSFP DR8 modules—available in both Retimer and LPO versions—deliver exceptional performance with low power consumption and up to 500 meters reach over single-mode fiber. Discover the future of high-speed interconnects, purpose-built for AI and cloud scale.

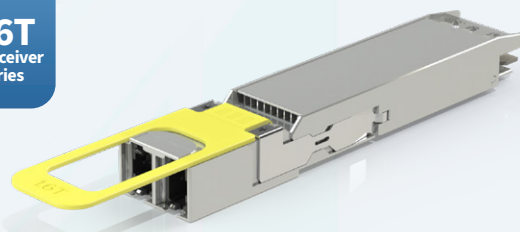
Feature

- 1.6T high-speed optical module products use 200G/lane silicon photonic chips
- Both electrical and optical interfaces support 8x200 Gbit/s PAM4
- Up to 500m transmission with 1310nm wavelength
- Power consumption<10W

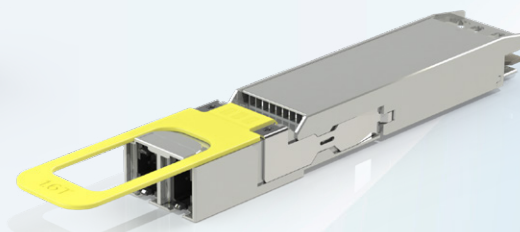
Applications

- AI Data Center
- 1.6T Ethernet

1.6T Transceiver series



▲ 1.6T OSFP DR8 LPO

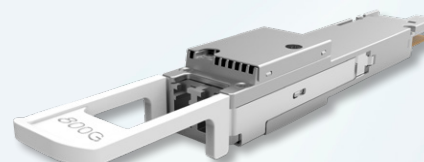


▲ 1.6T OSFP DR8 (Retimer)

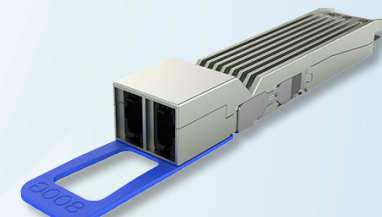
800G Transceiver series



▲ 800G VR8 OSFP



▲ 800G QSFP-DD ZR Pro

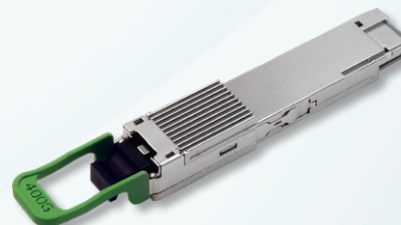


▲ 800G OSFP DR8

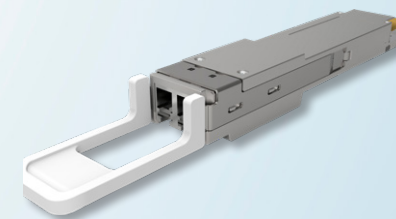
400G Transceiver series



▲ 400G QSFP-DD DR4



▲ 400G QSFP-DD FR4



▲ 400G QSFP-DD ZR+

High-Speed AOC Solutions

Built for Speed. Designed for AI.

ACON OPTICS offers a full range of high-performance Active Optical Cables (AOCs) including 800G, 400G, 200G, and 100G solutions, purpose-built for AI, cloud, and next-generation data center environments. These hot-pluggable, low-power AOCs deliver reliable, high-speed connectivity over multimode fiber—supporting up to 100 meters reach and optimized for modern networking demands.

800G



▲ 800G OSFP AOC

400G



▲ 400G QSFP-DD AOC

200G



▲ 200G QSFP56 AOC

100G



▲ 100G QSFP28 AOC

Feature

- Cable length available up to 100m on OM4 MMF 850nm VCSEL and PIN receiver
- 8-channel active optical cable
- 800G AUI-8 C2M Electrical interface
- Hot pluggable
- +3.3V power supply
- Operating case temperature: 0~+70°C
- 53.125Gb/s PAM4 ×8 channel
- OSFP MSA package
- Very low EMI and excellent ESD protection
- Power consumption less than 15.5W
- IIC rate up to 1MHz

Applications

- 800G Ethernet
- Data center switch
- InfiniBand NDR

High-Speed AEC / ACC / DAC Solutions

Engineered for Speed. Built for AI.

ACON OPTICS offers a complete portfolio of high-speed cable interconnect solutions—including AEC, ACC, and DAC—designed for AI-centric and cloud-scale data center infrastructure. With support for next-generation transmission rates and low-latency performance, these solutions enable reliable, high-efficiency connections across servers, switches, and storage systems. Optimized for scalability and energy-conscious operations, they help power the future of intelligent networks.

1.6T

▲ 1.6T OSFP DAC



▲ 1.6T OSFP AEC

800G

▲ 800G QSFP-DD AEC



▲ 800G OSFP AEC

400G

▲ 400G QSFP112 AEC

Feature

- OSFP TYPE2 Module compliant to OSFP MSA
- Transmission data rate up to PAM4 212.5Gbps per channel
- Enable 1600Gb/s Transmission
- Link length up to 1.5m
- Built-in EEPROM functions
- Operating case temperature 0°C to +70°C
- RoHS2.0 compliant

Applications

- Data centers (Servers, Switches, Storages)

Transceiver 1.6T , 800G

Category	Description	Data Rate	WaveLength	Reach	Temp.	Power Consumption
1.6T	OSFP DR8	1.6T	1310nm	500m	0~70°C	<30w
	OSFP DR8 LPO	1.6T	1310nm	500m	0~70°C	<10w
800G	OSFP DR8	800G	1310nm	500m	0~70°C	<14w
	OSFP SR8	800G	850nm	100m	0~70°C	<14w
	OSFP 2xFR4	800G	1271/1331nm	2km	0~70°C	<14w
	QSFP-DD 2xLR4	800G	1271/1291/1311/1331nm	10km	0~70°C	<16w

Transceiver 400G

Category	Description	Data Rate	WaveLength	Reach	Temp.	Power Consumption
400G	QSFP-DD DR4+	400G	1310nm	2km	0~70°C	<11w
	QSFP-DD DR4	400G	1310nm	500m	0~70°C	<11w
	QSFP-DD FR4	400G	1271/1331nm	2km	0~70°C	<11w
	QSFP-DD SR8	400G	850nm	70m(OM3)/100m(OM4)	0~70°C	<8.5w
	QSFP-DD ZR	400G	1528~1567nm	120km	0~75°C	<18w
	QSFP-DD ZR+	400G	1528~1567nm	450km	0~75°C	<22.5w
	QSFP-DD ZR+ Pro	400G	1528~1567nm	120km	0~75°C	<22.5w
	CFP2 DCO	400G	1528~1567nm	400km	0~70°C	<29.5w
	QSFP-DD LR4-10	400G	1271/1291/1311/1331nm	6km	0~70°C	<10w
	QSFP112 DR4	400G	1310nm	500m	0~70°C	<9w
	QSFP112 SR4	400G	850nm	100m	0~70°C	<8w
	SR4 QSFP112 Linear	400G	850nm	100m	0~70°C	<3w
	QSFP-DD SR4	400G	850nm	100m	0~70°C	<8w

Transceiver 200G, Coherent

Category	Description	Data Rate	WaveLength	Reach	Temp.	Power Consumption
200G	QSFP56 SR4	200G	850nm	70-100m	0~70°C	<4.5w
	QSFP56 FR4	200G	EML CWDM	2km	0~70°C	<6.5w
	QSFP-DD PSM8	200G	1310nm	2km	0~70°C	<8w
Coherent	QSFP-DD ZR Pro	800G	191.3-196.1GHz Grid	120km	0~75°C	<27w
	QSFP-DD ZR+ Pro	800G	150GHz Grid	480km	0~75°C	<28w
	OSFP ZR Pro	800G	191.3-196.1GHz Grid	120km	0~75°C	<27w
	OSFP ZR+ Pro	800G	150GHz Grid	480km	0~75°C	<28w

AOC

Category	Description	Data Rate	WaveLength	Reach	Temp.	Power Consumption
800G AOC	OSFP	800G	850nm	1~100m	0~70°C	<15.5w each end
400G QSFP-DD to 4x100G QSFP56 AOC	QSFP-DD to 4xQSFP56	400G	850nm	1~70m	0~70°C	<10w each end
400G AOC	QSFP-DD	400G	850nm	1~50m	0~70°C	<8.5w each end
200G AOC	QSFP56	200G	850nm	1~50m	0~70°C	<4.5w each end
100G AOC	QSFP28	100G	850nm	1-100m	0~70°C	<2.5W per cable end
40G AOC	QSFP+	40G	850nm	1~50m	0~70°C	<1.5w each end
25G AOC	SFP28	25G	850nm	1~50m	0~70°C	<1.0w each end

AEC

Max Aggregated Data-rate	Signal Modulation	Products (Breakout combination available)	Signal Conditioning Technology	Cable Length
400G	PAM4	QSFP56 QSFP56-2xQSFP28 QSFP-DD QSFP-DD-to-4xQSFP28 OSFP OSFP-to-4xQSFP28 QSFP112	DSP	up to 5.0m
800G	PAM4	OSFP800/OSFP-RHS QSFP-DD800 OSFP-XD	DSP/Retimer	up to 5.0m
1.6T	PAM4	OSFP1600	DSP	up to 3.0m

ACC

Max Aggregated Data-rate	Signal Modulation	Products (Breakout combination available)	Signal Conditioning Technology	Cable Length
200G	NRZ	QSFP-DD QSFP56	Redriver	up to 5.0m
400G	PAM4	SFP56 QSFP56 QSFP-DD OSFP SFP-DD	Redriver	up to 5.0m
800G	PAM4	OSFP800/OSFP-RHS QSFP-DD800 QSFP112 SFP112 SFP-DD112 OSFP-XD	Redriver	up to 5.0m
1.6T	PAM4	OSFP1600	Redriver	up to 3.0m

DAC

Max Aggregated Data-rate	Signal Modulation	Products (Breakout combination available)	Cable Length
100G	NRZ	SFP28 QSFP28	up to 5.0m
200G	NRZ	QSFP-DD QSFP56	up to 5.0m
400G	PAM4	SFP56 QSFP56 QSFP-DD OSFP SFP-DD	up to 3.0m
800G	PAM4	OSFP800/OSFP-RHS QSFP-DD800 QSFP112 SFP112 SFP-DD112 OSFP-XD	up to 3.0m
1.6T	PAM4	OSFP1600	up to 1.5m

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