

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 Transceiver

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.

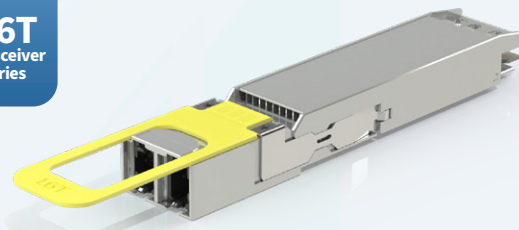
Feature

- 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

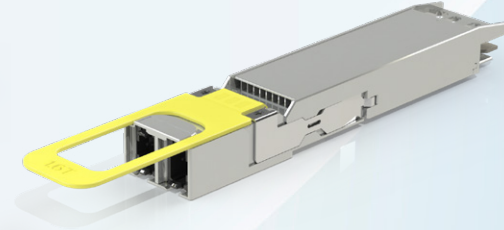
Applications

- AI Data Center
- 1.6T Ethernet

1.6T
Transceiver
series



▲ 1.6T OSFP DR8



▲ 1.6T OSFP DR8 LPO

800G
Transceiver
series



▲ 800G OSFP VR8



▲ 800G OSFP 2xDR4 LPO (Siph)



▲ 800G OSFP DR8

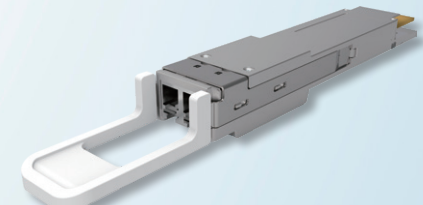
400G
Transceiver
series



▲ 400G QSFP-DD DR4



▲ 400G QSFP-DD FR4



▲ 400G QSFP-DD ZR+

High-Speed AOC Solution

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



◀ 400G QSFP-DD to 4x100G QSFP56 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 Solution

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

▲ 1.6T OSFP ACC

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
	OSFP DR8 LRO	1.6T	1310nm	500m	0~70°C	<18W
	OSFP 2xDR4	1.6T	1310nm	500m	0~70°C	/
	OSFP 2xFR4	1.6T	EML CWDM	2km	0~70°C	/
800G	OSFP 2xVR4	800G	850nm	50m	15°C~70°C	<15.5W
	OSFP DR4	800G	1310nm	500m	0~70°C	/
	OSFP 2xDR4	800G	1310nm	500m	0~70°C	<15.5W
	OSFP FR4	800G	EML CWDM	2km	0~70°C	/
	OSFP 2xFR4	800G	EML CWDM	2km	0~70°C	<15.5W
	QSFP-DD LR4	800G	EML CWDM	10km	0~70°C	<16W
	OSFP ZR/ZR+	800G	Cband DWDM	120km/480km	0~75°C	28W/29W
	QSFP-DD 2XLR4	800G	EML CWDM	10km	0~70°C	<16W
	QSFP-DD ZR/ZR+	800G	Cband DWDM	120km/480km	0~75°C	28W/29W

Transceiver 400G

Category	Description	Data Rate	WaveLength	Reach	Temp.	Power Consumption
400G	OSFP DR4	400G	1310nm	500m	0~70°C	<9W
	OSFP VR4	400G	850nm	50m	0~70°C	<8.5W
	QSFP112 VR4	400G	850nm	50m	0~70°C	<8W
	QSFP112 DR4 LPO	400G	1310nm	500m	0~70°C	<4.5W
	QSFP112 DR4	400G	1310nm	500m	0~70°C	<9W
	QSFP112 FR4	400G	EML CWDM	2km	0~70°C	<9W
	QSFP-DD VR4	400G	850nm	50m	0~70°C	<8W
	QSFP-DD SR8	400G	850nm	70-100m	0~70°C	<8.5W
	QSFP-DD DR4	400G	1310nm	500m	0~70°C	<8W
	QSFP-DD FR4	400G	EML CWDM	2km	0~70°C	<8W
	QSFP-DD PLR4	400G	1310nm	10km	0~70°C	<8W
	QSFP-DD LR4	400G	EML CWDM	10km	0~70°C	<8W
	QSFP-DD ZR/ZR+	400G	Cband DWDM	120km/450km	0~70°C	18/21@Typ 19/22.5@Max
	QSFP-DD ZR+ Pro	400G	Cband DWDM	450km@DWDM 90km@Gray	0~70°C	22@typ 22.5@Max
QSFP-DD ZR+ Pro@4dBm	400G	Cband DWDM	450km@DWDM	0~75°C	22@typ 22.5@Max	

Transceiver 200G, 100G

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
100G	QSFP28 DR1	100G	1310nm	500m	0~70°C	< 4W
	QSFP28 SR4	100G	850nm	70m(OM3)/100m(OM4)	0~70°C	<2.5W
	QSFP28 LR4	100G	EML LWDM	10km	0~70°C	<3.5W
	QSFP28 CWDM4	100G	EML CWDM	2km	0~70°C	< 3.5W
	QSFP28 PSM4	100G	1310nm	500m	0~70°C	< 3.5W
	SFP112 LR	100G	1310nm	10km	0~70°C	< 3.5W
	QSFP28 LR1, Hermetic	100G	1310nm	10km	0~70°C	< 4.5W
	QSFP28 LR4 5G	100G	1295/1300/1304/1309	10km	0~70°C	< 4W
	QSFP28 ER4/ER4 I-T	100G	EML LWDM	40km	0~70°C / ~40°C ~85°C	<5W/6W
	QSFP28 ZR4/ZR4 I-T	100G	EML LWDM	80km	0~70°C / ~40°C ~85°C	<5.5W/6.5W

AOC

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

AEC

Category	Form Factor	Data Rate	Length	Protocol
1.6T	OSFP to OSFP	1.6T	0.5m~3m	Ethernet
1.6T	QSFP-DD to QSFP-DD	1.6T	0.5m~3m	Ethernet
800G	OSFP to OSFP	800G	3m~9m	Ethernet
	OSFP to 2xOSFP	800G to 2x400G	3m~9m	Ethernet
	OSFP to 2xOSFP-RHS	800G to 2x400G	3m~9m	Ethernet
	OSFP to 2xQSFP112	800G to 2x400G	3m~9m	Ethernet
	QSFP-DD to QSFP-DD	800G	3m~7m	Ethernet
	QSFP-DD to 2xQSFP112	800G to 2x400G	3m~7m	Ethernet
400G	QSFP112 to QSFP112	400G	3m~7m	Ethernet

ACC 1.6T, 800G

Category	Form Factor	Data Rate	Length	Protocol
1.6T	OSFP to OSFP	1.6T	1m~3m	IB XDR
	OSFP to OSFP	1.6T	1m~3m	Ethernet
800G	OSFP to 2xOSFP-RHS	800G to 2x400G	1m~5m	IB NDR
	OSFP to 4xOSFP-RHS	800G to 4x200G	1m~5m	IB NDR
	OSFP to 2xQSFP112	800G to 2x400G	1m~5m	IB NDR
	OSFP to 4xQSFP112	800G to 4x200G	1m~5m	IB NDR
	OSFP to OSFP	800G	1m~5m	IB NDR
	OSFP to 2xOSFP	800G to 2x400G	1m~5m	Ethernet
	OSFP to 4xOSFP-RHS	800G to 4x200G	1m~5m	Ethernet
	OSFP to 2xQSFP112	800G to 2x400G	1m~5m	Ethernet
	OSFP to 4xQSFP112	800G to 4x200G	1m~5m	Ethernet
	OSFP to OSFP	800G	1m~5m	Ethernet
	QSFP-DD to QSFP-DD	800G	1m~5m	Ethernet

ACC 400G, 200G

Category	Form Factor	Data Rate	Length	Protocol
400G	OSFP to 2xQSFP56	400G to 2x200G	1m~7m	IB HDR
	QSFP112 to QSFP112	400G	1m~5m	Ethernet
	OSFP to 2xQSFP56	400G to 2x200G	1m~7m	Ethernet
200G	QSFP56 to QSFP56	200G	1m~7m	IB HDR
	QSFP56 to 2xQSFP56	200G to 2x100G	1m~7m	IB HDR
	QSFP56 to QSFP56	200G	1m~7m	Ethernet
	QSFP56 to 2xQSFP56	200G to 2x100G	1m~7m	Ethernet

DAC 1.6T, 800G

Category	Form Factor	Data Rate	Length	Protocol
1.6T	OSFP to OSFP	1.6T	0.5m~1m	IB XDR
	OSFP to OSFP	1.6T	0.5m~1m	Ethernet
	QSFP-DD to QSFP-DD	1.6T	0.5m~1m	Ethernet
800G	OSFP to 2xOSFP-RHS	800G to 2x400G	0.5m~3m	IB NDR
	OSFP to 4xOSFP-RHS	800G to 4x200G	0.5m~3m	IB NDR
	OSFP to 2xQSFP112	800G to 2x400G	0.5m~3m	IB NDR
	OSFP to 4xQSFP112	800G to 4x200G	0.5m~3m	IB NDR
	OSFP to OSFP	800G	0.5m~3m	IB NDR
	QSFP-DD to QSFP-DD	800G	1m~2m	Ethernet
	OSFP to OSFP	800G	1m~2m	Ethernet
	OSFP to 2xQSFP112	800G to 2x400G	1m~2m	Ethernet
	OSFP to 2xQSFP-DD	800G to 2x400G	1m~2m	Ethernet
	OSFP to 2xOSFP-RHS	800G to 2x400G	1m~2m	Ethernet
	OSFP to 4xQSFP112	800G to 4x200G	1m~2m	Ethernet

DAC 400G, 200G

Category	Form Factor	Data Rate	Length	Protocol
400G	OSFP to 2xQSFP112	400G to 2x200G	0.5m~2m	IB HDR
	OSFP to 4xQSFP112	400G to 4x100G	0.5m~2m	IB HDR
	QSFP-DD to QSFP-DD	400G	0.5m~3m	Ethernet
	QSFP-DD to 2xQSFP56	400G to 2x200G	1m~3m	Ethernet
	QSFP-DD to 4xQSFP56	400G to 4x100G	1m~3m	Ethernet
200G	QSFP112 to 2xQSFP112	200G to 2x100G	0.5m~2m	IB HDR
	QSFP112 to QSFP112	200G	0.5m~2m	IB HDR
	QSFP56 to 2xQSFP56	200G to 2x100G	1m~3m	Ethernet
	QSFP56 to 4xQSFP56	200G to 4x50G	1m~3m	Ethernet
	QSFP56 to QSFP56	200G	0.5m~3m	Ethernet

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