

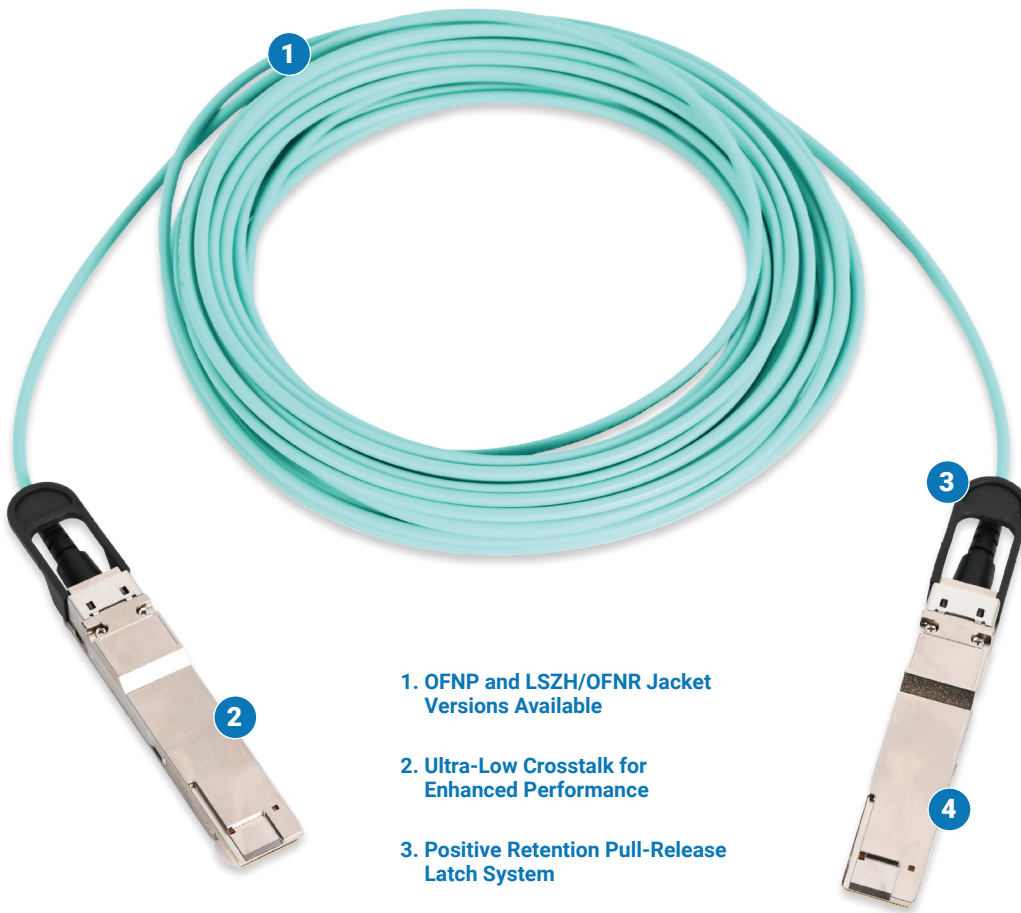
# Active Optical Cables

## 400G PAM4 QSFP-DD Straight Throughs and Breakouts

Regional Availability – Global



Siemon's 50G per lane PAM4 Ethernet QSFP-DD Active Optical Cable assemblies (AOCs) are designed to exceed industry standard performance offering a cost-effective, low latency, low-power option for high-speed data center interconnects. The Active Optical Cable assemblies support 400G PAM4 applications and are available in standard lengths up to 100 meters including 1:2, 1:4 and 1:8 breakouts.



1. OFNP and LSZH/OFNR Jacket Versions Available
2. Ultra-Low Crosstalk for Enhanced Performance
3. Positive Retention Pull-Release Latch System
4. MSA Compliant Connectors



QSFP-DD 1:2 Breakout



QSFP-DD 1:4 Breakout

### Applications

- Ethernet 400GBASE SR8
- Top-of-Rack
- Rack-to-Rack
- Switch-to-Switch
- Switch-to-Server
- Network Interface Adapter
- Accelerator Cards
- Storage
- Routers
- Servers

### Standards Compliance

QSFP-DD	SFP	QSFP
IEEE 802.3cd	IEEE 802.3cd	IEEE 802.3cd
QSFP-DD MSA	SFF-8402	SFF-8636
CMIS	SFF-8071	SFF-8661
	SFF-8419	SFF-8672
	SFF-8472	SFF-8679

## PHYSICAL PROPERTIES – CONNECTOR

CONNECTOR TYPE		QSFP-DD	QSFP	QSFP	SFP
LANES UTILIZED		SR8	SR4	SR2	SR1
CONNECTOR SIDE(S)		A/B	B	B	B
CABLE ASSEMBLY TYPE		1:1	1:2	1:4	1:8
50G PER LANE ETHERNET	Application Speed	400G PAM4	200G PAM4	100G PAM4	50G PAM4
	Power Supply Current Per End (Max)	2.3 A	1.1 A	0.71 A	220 mA
	Power Consumption Per End (Max)	8.0 W	3.9 W	2.5 W	0.80 W
SUPPLY VOLTAGE		3.47V	3.47V	3.47V	3.47V
INSERTION FORCE (Max)		90N	60N	60N	18N
EXTRACTION FORCE (Max)		50N	30N	30N	12.5N
RETENTION FORCE (Max)		90N	90N	90N	90N
DURABILITY (Min)		50 cycles	250 cycles	250 cycles	250 cycles
OPERATING TEMPERATURE		0 to 70°C (32 to 158°F)			
STORAGE TEMPERATURE		-40 to 85°C (-40 to 185°F)			

## PHYSICAL PROPERTIES – FIBER

CONSTRUCTION	LSZH/OFNR OM3	LSZH/OFNR OM4	OFNP OM3	OFNP OM4
FLAMMABILITY RATING	Riser	Riser	Plenum	Plenum
CABLE O.D. (mm)	3.0 mm	3.0 mm	3.0 mm	3.0 mm
BEND RADIUS (mm) SINGLE	30.0 mm	30.0 mm	30.0 mm	30.0 mm
BEND RADIUS (mm) REPEATED	60.0 mm	60.0 mm	60.0 mm	60.0 mm
SR(X) MAX LENGTH	70 m	100 m	70 m	100 m

# Ordering Information

## 400G PAM4 QSFP-DD AOC

(XXX) -56 (X) (XX.X) -2 (X) Q

CONNECTOR TYPE	Side A	Side B	CABLE STYLE	LENGTH (meters)	FIBER TYPE
D1D	QSFP-DD (SR8)	QSFP-DD (SR8)	F = AOC (Active Optical Cable)	00.5 = 0.5 m	Y = OM3 Plenum (OFNP)
D2Q	QSFP-DD (SR8)	2QSFP (SR4)		01.0 = 1.0 m	V = OM3 LSZH Riser (LSZH/OFNR)
D4Q	QSFP-DD (SR8)	4QSFP (SR2)		50.0 = 50.0 m	X = OM4 Plenum (OFNP)
D8S	QSFP-DD (SR8)	8SFP (SR1)		100 = 100 m	T = OM4 LSZH Riser (LSZH/OFNR)

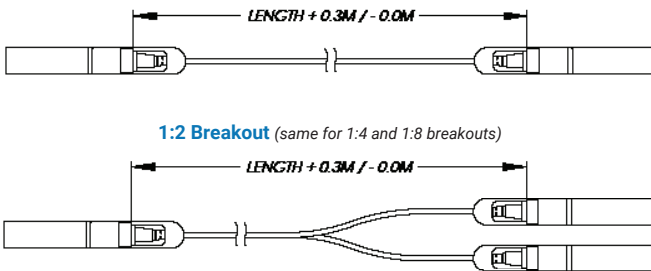
Please contact our Technical Sales Group if you require connectivity or cable configurations that are not listed above.

### Part Number Examples:

Part Number	Description
D1D-56F0100-2TQ	AOC, 400G PAM4, SR8/SR8, QSFP-DD, OM4, 100m, LSZH/OFNR, Aqua
D2Q-56F25.0-2VQ	AOC, 400G PAM4, SR8/SR4, QSFP-DD/2QSFP56, OM3, 25m, LSZH/OFNR, Aqua
D2R-56F75.0-2XQ	AOC, 400G PAM4, SR8/SR4, QSFP-DD/2QSFP-RHS, OM4, 75m, OFNP, Aqua
D4Q-56F05.0-2YQ	AOC, 400G PAM4, SR8/SR2, QSFP-DD/4QSFP56, OM3, 5m, OFNP, Aqua

### Notes:

SFP, SFP-DD, and QSFP-DD are not supported by InfiniBand™  
RS-544 FEC



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