Active Optical Cable SFP28 to SFP28, 25G, 1 to 25 Meters
Riser Rater (OFNR), Coded for Various Platforms

AOC-S28-ER-RRR-PPP

Features

- Operating Data Rates up to 25G
- Distance Range from 1 Meter to 25 Meters (additional standard and custom lengths are available)
- Hot Pluggable SFP28
- Simplifies Patching and Offers a Cost-effective approach for Short Links
- Standard Temperature Range (available in Industrial Operating Temperatures)
- 100% compatible with other OEM and third-party Active Optical Cables

Applications

- Telecommunication Service Providers
- Metro Ethernet
- Intra-rack and across rack interconnect
- Transport Networks
- Switch and router high speed
- backplane interconnect
- High-performance computing clusters

Description

The L-com AOC-S28-ER-RRR-PPP series is a 25G SFP28 to SFP28 Active Optical Cable (AOC), that is factory pre-programmed with all the necessary configuration data for seamless network integration and digital diagnostics for performance monitoring. The L-com AOC-S28-ER-RRR-PPP Active Optical Cable series is designed, programmed and tested to perform identically to and is 100% compatible with other OEM and third-party Active Optical Cables. The L-com's AOC-S28-ER-RRR-PPP Active Optical Cable series has been manufactured with riser rated (OFNR) cable in lengths from 1 meter to 25 meters (additional standard and custom lengths are available) of reach at a center wavelength of 850 nm. The L-com AOC-S28-ER-RRR-PPP Active Optical Cable series is tested for 100% functionality and guaranteed compatible for outstanding network performance.

L-com offers all brands and form factors of Active Optical Cables, optical transceivers and cabling for all your networking needs. Now you have a reliable, compatible and affordable means to expand your network while maintaining its integrity. Contact our technical support and sales staff with your questions on fiber optic connectivity or other L-com products.

Configuration

Module Form Factor	SFP28
Maximum Data Rate	25Gbps
Manufacturer Compatibility	Various Platforms, See Table
Distance	1 to 25 m
Jacket Burn Rating	OFNR

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Center Wavelength		850		nm
Supply Voltage (VccT, VccR)	3.14	3.3	3.46	V
Supply Current (Icc)			300	mA
Transmitter Differential Input Swing (Vin,pp)	180		1,000	mVpp
Transmitter Input Voltage Tolerance (VinT)	-0.3		4	V

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications:
AOC-S28-ER-RRR-PPP

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Receiver Output Voltage	-0.3	4	V

Electrical Notes
- AC coupled internally. Self-biasing 100 ohms differential input.

Environmental Specifications
Temperature
Operating Range   +0C to +70C (Without air flow)
Storage Range   -40C to +85C

Relative Humidity   5% to 95%

Compliance Certifications (see product page for current document)

Plotted and Other Data
Notes:

USA & Canada **+1(800) 341-5266** | International **+1(978) 682-6936** | **L-com.com**

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SFP28 Pin Assignment & Pin Assignment Table

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Pin	Symbol	Name/Description	NOTE
1	V_{EET}	Transmitter Ground (Common with Receiver Ground)	1
2	T_{FAULT}	Transmitter Fault.	2
3	T_{DIS}	Transmitter Disable. Laser output disabled on high or open.	3
4	SDA	2-wire Serial Interface Data Line	4
5	SCL	2-wire Serial Interface Clock Line	4
6	MOD_ABS	Module Absent. Grounded within the module	4
7	RS0	Rate Select 0	5
8	LOS	Loss of Signal indication. Logic 0 indicates normal operation.	6
9	RS1	No connection required	1
10	V_{EER}	Receiver Ground (Common with Transmitter Ground)	1
11	V_{EER}	Receiver Ground (Common with Transmitter Ground)	1
12	RD-	Receiver Inverted DATA out. AC Coupled	
13	RD+	Receiver Non-inverted DATA out. AC Coupled	
14	V_{EER}	Receiver Ground (Common with Transmitter Ground)	1
15	V_{CCR}	Receiver Power Supply	
16	V_{CCT}	Transmitter Power Supply	
17	V_{EET}	Transmitter Ground (Common with Receiver Ground)	1
18	TD+	Transmitter Non-Inverted DATA in. AC Coupled.	
19	TD-	Transmitter Inverted DATA in. AC Coupled.	
20	V_{EET}	Transmitter Ground (Common with Receiver Ground)	1

Notes:

1. Circuit ground is internally isolated from chassis ground.
2. T_{FAULT} is an open collector/drain output, which should be pulled up with a 4.7k – 10k Ohms resistor on the host board if intended for use. Pull up voltage should be between 2.0V to Vcc + 0.3V.A high output indicates a transmitter fault caused by either the TX bias current or the TX output power exceeding the preset alarm thresholds. A low output indicates normal operation. In the low state, the output is pulled to <0.8V.
3. Laser output disabled on T_{DIS} >2.0V or open, enabled on T_{DIS} <0.8V.
4. Should be pulled up with 4.7kΩ- 10kΩ host board to a voltage between 2.0V and 3.6V. MOD_ABS pulls line low to indicate module is plugged in.
5. Internally pulled down per SFF-8431 Rev 4.1.
6. LOS is open collector output. It should be pulled up with 4.7kΩ – 10kΩ on host board to a voltage between 2.0V and 3.6V. Logic 0 indicates normal operation; logic 1 indicates loss of signal.

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Available Platforms				
OEM/Designations				
A10 Networks	A1N		Force10	F10
Accedian	ACC		Fortinet	FOR
Adtran	ADT		Fujitsu	FUJ
Adva	ADV		Fujitsu 4100	F41
Alcatel 73XX	A73		Fujitsu 7120	F71
Alcatel 7x50	A7x		Fujitsu CDS	FCD
Alcatel TSS-100	ATS		Fujitsu 9500	F95
Alcatel DMX	ADM		Gigamon	GIG
Alcatel LambdaUnite	ALU		Hewlett Packard	HPP
Alcatel OMNI	AOM		Huawei	HWI
Alcatel PSS 1830	A83		IBM	IBM
Allied Telesis	ATE		Infinera	INF
Arista	ARI		Ixia	IXA
Arista/Dell	ARD		Juniper	JUN
Arris	ARS		Mellanox	MEL
Avaya/Nortel Passport	ANP		Meraki	MER
Brocade/Foundry	BFO		MikroTik	MTK
BTI	BTI		MOXA	MOX
Calix	CLX		MRV	MRV
Check Point	CHP		MSA	MSA
Ciena	CAN		NetApp	NTA
Ciena/Nortel OM6500	CNO		NetScout	NTS
Canoga Perkins	CGP		Nokia	NOK
Cisco	CSC		Nokia 7xxx	N7x
Cisco ONS	ONS		Occam	OCM
Coriant	CRN		Optelian	OPT
Cyan	CYN		Palo Alto Networks	PAN
Dasan Networks	DAN		RAD	RAD
Dell	DLL		Raisecom	RAI
Edgecore Networks	ECN		Tejas Network	TEN
Ekinops	EKS		Telco	TEL
Enterasys	ENT		Tellabs	TLB
Ericsson	ERC		Transmode	TSM
Extreme	EXT		Ubiquiti Networks	UBI
F5	F5		Zhone	ZHO

Cable Lengths	
Meters	Designations
1	001
2	002
3	003
5	005
7	007
10	010
15	015
20	020
25	025
30	030

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Active Optical Cable SFP28 to SFP28, 25G, 1 to 25 Meters Riser Rater (OFNR), Coded for Various Platforms from L-com has same day shipment for domestic and International orders. Our portfolio includes coaxial cable assemblies, connectors, adapters and custom products as well as lightning and surge protectors, NEMA rated enclosures, and an RF product line which includes antennas, amplifiers, passive, and active components.

The information contained within this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part in order to impliment improvements. L-com reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. L-com does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and L-com does not assume liability arising out of the use of any part or document.

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L-com CAD Drawing

LENGTH

METERS	FEET
1.0	3.28
3.0	9.84
5.0	16.41
7.0	22.96
15.0	49.22
25.0	82.03

COMPATIBLE

ARISTA	CISCO	DELL	JUNIPER	MELLANOX	MSA
AOC-S28-ER-001-ARI	AOC-S28-ER-001-CSC	AOC-S28-ER-001-DLL	AOC-S28-ER-001-JUN	AOC-S28-ER-001-MEL	
AOC-S28-ER-003-ARI	AOC-S28-ER-003-CSC	AOC-S28-ER-003-DLL	AOC-S28-ER-003-JUN	AOC-S28-ER-003-MEL	
AOC-S28-ER-005-ARI	AOC-S28-ER-005-CSC	AOC-S28-ER-005-DLL			
AOC-S28-ER-007-ARI	AOC-S28-ER-007-CSC	AOC-S28-ER-007-DLL			
		AOC-S28-ER-015-DLL			AOC-S28-ER-015-MSA
		AOC-S28-ER-025-DLL			AOC-S28-ER-025-MSA

Units in mm

Cable Length XX±30

FIBER OPTICS

PRODUCT DESCRIPTION: Active Optical Cable, SFP28, 25G, Riser Rated

L-com, an INFINITE brand
50 High Street, West Mill, North Andover, MA 01845 USA.
Phone: 1.800.341.5266 / 1.978.682.6936

CAGE CODE 43321 | ITEM NO. AOC-S28-ER | REV A
SIZE B | SCALE: NONE | CAD FILE: AOC-S28-ER SLD.DRW | SHEET 1 OF 1

CONFIGURATION DETAILS OF UNDIMENSIONED FEATURES MAY VARY
COLOR VARIATIONS MAY OCCUR

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES [mm]
THIRD-ANGLE PROJECTION

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