



CLOS AEC SPECIFICATION

PLUG & PLAY ACTIVE ELECTRICAL CABLE for In-Rack Ethernet Applications in Distributed, Disaggregated Chassis

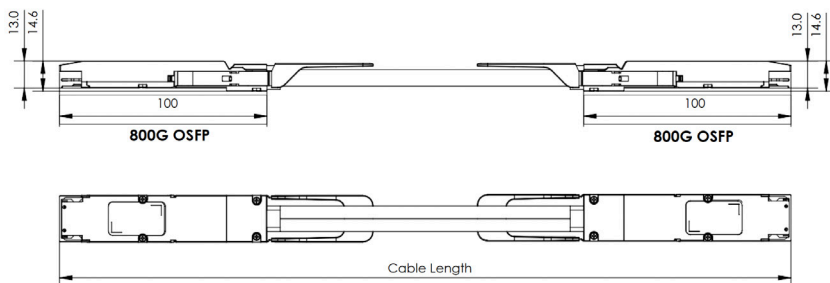
800G OSFP PAM4 to 800G OSFP PAM4

Credo's HiWire™ CLOS Active Electrical Cable (CLOS AEC)

A thin, low power 800G AEC specifically designed for in-rack applications replacing backplanes in Distributed, Disaggregated Chassis (DDC) implementations. Plug & Play CLOS AECs consume up to 50% less power than optical and take up to 75% less volume than DACs, enabling interconnect densities of up to 500 cables per rack.

Credo's CAC8XX321A1A-B0-HW HiWire CLOS AEC

Designed for telecom and data center use. It can sustain 8 lanes of 106G-PAM4 signal in each direction, providing bi-directional 800Gbps traffic per cable. The use and replacement of CAC8XX321A1A-B0-HW AEC is simple and straightforward as it adopts standard OSFP form factor and complies to MSA specifications.



Features

The following are the key features of the HiWire LP CLOS AEC:

- Recognizable, purple LSZH jacket
- 800G to 800G data rate
- CMIS 4.0 compliant
- Single 3.3V power supply
- Low power consumption:
 - Typ. 10W power dissipation each end
- BER < 10^{-15} (post FEC)
- Hot pluggable
- RoHS2 compliant
- I²C management interface
- Operating case temperature range: 0° to +70°C

Supported Standards and Interfaces

- Common Management Interface Specification (CMIS) v4.0
- OSFP MSA v3.0

Key Features

Parameter	Value
Module Form Factor	OSFP
Number of Data Lanes	8 TX and 8 RX per module (PAM4)
Maximum Aggregate Data Rate	800Gbps
Nominal Data Rate per Lane	106.25Gbps (PAM4)
Electrical Interface and Pin-out	60-pin edge connector
Pin Description	Per OSFP Hardware Specification
Management Interface	I ² C, serial, timing per Common Management Interface Specification for 8X/16X Pluggable Transceivers v 4.0
Length of Copper AEC	0.5m - 2.5m in 0.5m increments
BER (Pre-FEC)*	Typ. <10 ⁻⁸
BER (Post-FEC)*	<10 ⁻¹⁵

* Tested with QPRBS31 pattern

Product Selections

Part Number	Length	AWG
CAC805321A1A-B0-HW	0.5m	32
CAC81X321A1A-B0-HW	1.0m	32
CAC815321A1A-B0-HW	1.5m	32
CAC82X321A1A-B0-HW	2.0m	32
CAC825321A1A-B0-HW	2.5m	32

Mechanicals

Parameter	Cable Type	Typical	Length
Diameter	16P 32AWG	6.8mm	0.5-2.5m

For more information please visit www.credosemi.com
or email sales@credosemi.com