



LP SPAN AEC SPECIFICATION

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

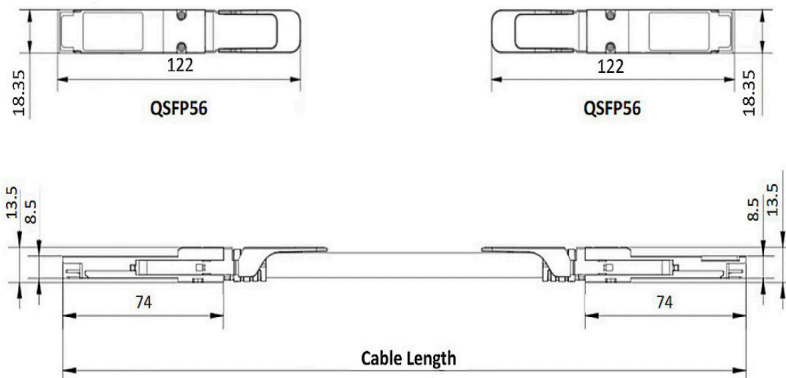
200G (4x56G) QSFP56 PAM4 to 200G (4x56G) QSFP56 PAM4

Credo's HiWire™ Low Power SPAN Active Electrical Cable (LP SPAN AEC)

A thin, low power 200G AEC specifically designed for rack-to-rack connectivity, these cables support up to 7m reach, consume up to 25% less power than optical and take 75% less volume than DACs, and offer a 10-year service life.

Credo's CAC2XX321D1D-DX-HW HiWire LP SPAN AEC

Designed for telecom and data center use. It can sustain 4 lanes of 56G-PAM4 signal in each direction, providing bi-directional 200Gbps traffic per cable. The use and replacement of this AEC is simple and straightforward as it adopts standard QSFP-DD type 2 form factor and complies to MSA specifications.



Features

The following are the key features of the HiWire SHIFT AEC:

- Recognizable, purple PVC jacket
- 200G to 200G data rate
- Built-in diagnostic features
- SFF-8636 compliant
- Single 3.3V power supply
- Typ.4.5W 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

- SNIA SFF-8636 Management Interface for 4 Lane Modules and Cables
- SNIA SFF-8679 QSFP28 Electrical Specification

Key Features

Parameter	Value
Module Form Factor	QSFP56
Number of Data Lanes	4 TX and 4 RX per module (PAM4)
Maximum Aggregate Data Rate	200Gbps
Nominal Data Rate per Lane	53.125Gbps (PAM4)
Electrical Interface and Pin-out	38-pin edge connector
Pin Description	Per SFF-8679
Management Interface	I ² C, serial, timing per SFF-8636
Length of Copper AEC	3.0m - 7.0m in 2.0m increments
BER (Pre-FEC)*	Typ. <10 ⁻⁸
BER (Post-FEC)*	<10 ⁻¹⁵

* Tested with QPRBS31 pattern

Product Selections

Part Number	Length	AWG	Weight
CAC23x321Q1Q-C0-HW	3 meters	32	330g
CAC25X301Q1Q-C0-HW	5 meters	30	710g
CAC27X281Q1Q-C0-HW	7 meters	28	1,040g

Mechanicals

Parameter	Cable Type	Typical
Diameter	8P 30AWG	1 x 6.5mm
QSFP56 Connectors on Both Side		
Min. bend radius	8P 30AWG	60mm

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

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