

# Volex 800G QSFP-DD Active Electrical Cable



Volex's 800G QSFP-DD Active Electrical Cable features 8 transmitting and 8 receiving 100Gbps PAM4 channels for 800G operation. The cable assembly meets IEEE 802.3ck 800GBase-CR8, 400GBase-CR4, 200Gbase-CR2 and 100GBase-CR1 standard with substantial signal integrity margin providing high performance and bandwidth interconnect solutions for high-density applications. The signal integrity, severely stressed under high-speed data transmission, is enhanced via advanced DSP equalization. The result is longer reach up to 5M with smallest cable size and highest flexibility. The result is a highly flexible DAC cable which reduces the overall bend space up to 30% vs the passive version, making it ideal for deployment in high density rack.

As next-gen data centers deploy faster speed in a tighter space, they need high performance cables that reduce power consumption, provide reliable operation and are low cost. Volex's QSFP-DD Active Electric Cable is designed to meet the next-gen data center needs and is a cost-effective alternative to the high-power consumption Active Optical Cable.



Low power consumption and heat dissipation



Complete cable assembly uniquely terminated at the factory to provide the most reliable operation



100% tested for signal integrity with serial number traceability

## FEATURES AND SPECIFICATIONS

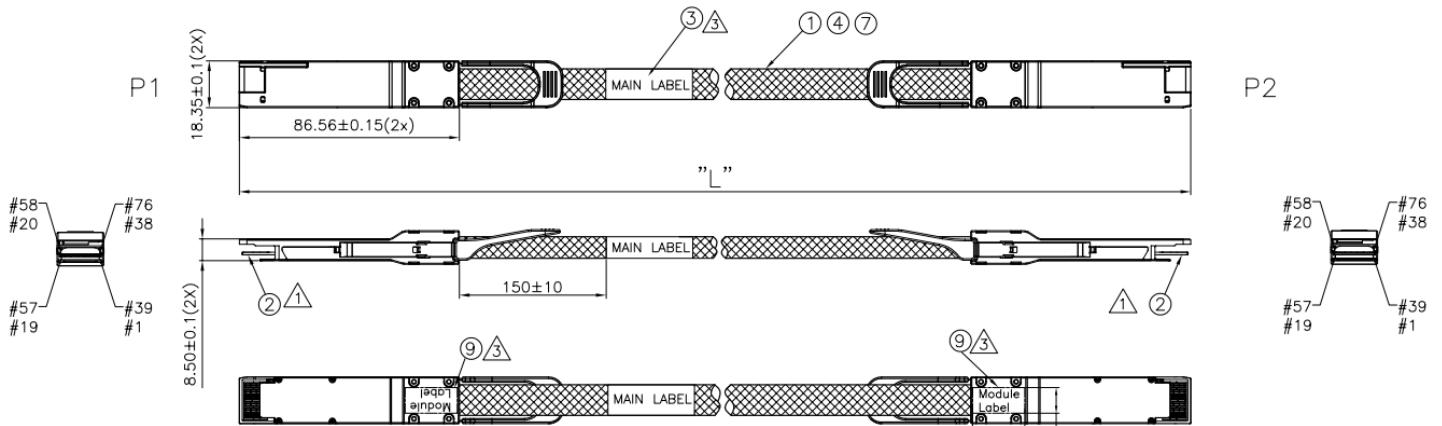
<b>Product Type</b>	800G QSFP-DD active electrical cable assembly
<b>Conductor Treatment</b>	Laser stripped conductors
<b>Cable Type</b>	High speed twinax cable, 16-pair differential, 100 +/-5 ohms
<b>Cable Colour</b>	Black
<b>Cable Jacket</b>	Plastic braided mesh
<b>Packaging</b>	PE bag
<b>Power Supply Voltage</b>	3.3V
<b>Power Consumption</b>	<12W per active module(8 channels)
<b>Temperature Range</b>	0 - 70°C
<b>Retention Force</b>	Minimum 125N per MSA specification
<b>Insertion Force</b>	Maximum 90N per MSA specification
<b>EEPROM</b>	CMIS 5.0 compliance
<b>Cable Termination</b>	100% factory tested including comprehensive signal integrity verification and serial number traceability using advanced Manufacturing Execution Systems

Volex reserves the right to change specifications and availability without prior notice.

**High-Speed Interconnect**

Applications	Standards Compliance
<ul style="list-style-type: none"> <li>Switches, Servers, Routers, Storage Arrays</li> <li>Networking Equipment</li> <li>Data Centres</li> <li>Telecommunication Central Offices</li> <li>Test and Measurement Equipment</li> </ul>	<ul style="list-style-type: none"> <li>IEEE 802.3ck, InfiniBand NDR</li> <li>QSFP-DD/QSFP-DD800/QSFP112 HW Rev 6.3</li> <li>CMIS 5.0</li> <li>EIA-364</li> <li>UL 94, 1581, VW1, File No. E510564</li> <li>RoHS</li> </ul>

## Mechanical Drawing



Volex P/N	Cable Length (m)	Cable Gauge (AWG)	Cable OD (mm)
DQ62BDG10BE	1.00	32AWG	7.3
DQ62BDG20BE	2.00	32AWG	7.3
DQ62BDG30BE	3.00	32AWG	7.3
DQ68BDG50BE	5.00	28AWG	10.6

1.0 – 5.0m lengths available with 32AWG-28AWG conductor sizes to achieve maximum performance.

### Options Available

- Custom colours for cable jacket
- Custom colours for pull tab
- Custom EEPROM mapping

Volex Worldwide CONTACT INFO		
<b>Americas</b> Tel: +1 512 608 2402	<b>EMEA</b> Tel: +44 7768 924844	
<b>China</b> Tel: +86 159 5019 6906	<b>Asia Pacific</b> Tel: +65 6904 1545	<b>India</b> Tel: +91 99406 10637

Contact us at [sales@volex.com](mailto:sales@volex.com)  
for assistance in finding the right solution for your needs.