

Product Highlights

Covers Vast Distances

Support for maximum cable lengths of between 30 meters and 80 kilometers is ideal for businesses spanning multiple premises.

High Performance

Full duplex 10-Gigabit data transfer rates provide the network transmission speeds that business environments demand.

Hot Pluggable

Easily switch out transceivers while the power is on, facilitating network maintenance and minimizing downtime.



DEM-400 Series

10G SFP+/Ethernet Transceivers

Features

- Enhanced Small Form Factor Pluggable (SFP+)
- Multi-Source Agreement (MSA) compliant
- Supports 10G Ethernet
- RoHS compliant
- IEEE 802.3ae/aq compliant
- Supports cable distances of up to 80 km¹
- Hot pluggable

D-Link's DEM-400 Series transceivers are hot-swappable SFP+ transceivers that plug into SFP+ slots on switches and support 10G Ethernet. They offer customers a wide variety of 10G Ethernet connectivity options for data centers, enterprise wiring closets, and service provider transport applications.

Enhanced Small Form-Factor Pluggable (SFP+) Format

The transceivers use the Enhanced Small Form-factor Pluggable format (SFP+). The SFP+ form factor is smaller than other form factors such as Xenpak, X2, and 10G XFP, ensuring lower costs, lower power disruption, and higher port density. They provide the necessary signal amplification for data to be transmitted to the network cable from the port, and vice versa, for the port to receive data from the network cable.

Hot Pluggable

All D-Link transceivers are hot-pluggable. You can connect a transceiver while the system is powered on without causing any problems. This permits modules to be added or removed without interrupting the network.

10G Ethernet Speeds

The transceivers all support 10G Ethernet, which results in very fast data transmissions of up to 10 Gbps. This is 10 times faster than Gigabit Ethernet and enables the switch to handle faster and higher data transmissions, making it very suitable for business needs.

Bi-Directional WDM Transmission¹

Bi-directional WDM transmission allows data to be transmitted simultaneously in both directions on a fiber cable. This helps you save on the cost of deploying extra fiber cables as well as allows for more flexible bandwidth allocation.

DEM-400 Series 10G SFP+/Ethernet Transceivers

Technical Specifications

	DEM-410T	DEM-431XT	DEM-432XT
Standard Compliance	- IEEE-802.3ae 10GBASE-T	- IEEE-802.3ae 10GBASE-SR	- IEEE-802.3ae 10GBASE-LR
Form Factor Type	RJ45	SFP+	SFP+
Fibre Channel FC-Pi Standard	—	1200-Mx-SN-I	1200-SM-LL-L
Fiber Media Support	—	Multi-Mode	Single-Mode
Distance Capacity	30 m	62.5 µm, OM1 200 MHz-km: 33 m 50/125 µm, OM2 500 MHz-km: 82 m 50/125 µm, OM3 2000 MHz-km: 300 m 50/125 µm, OM4 2000 MHz-km: 300 m	10 km
Hot Pluggable	✓	✓	✓
MSA Compliant	✓	✓	✓
RoHS Compliant	✓	✓	✓
Speed	10 Gbps	10 Gbps	10 Gbps
Connector	RJ45	Duplex LC Connector	Duplex LC Connector
Single/Bi-Directional	—	Single Direction	Single Direction
Wavelength	—	850 nm	1310 nm
Output (TX) Optical Power	—	- Max.: -1 dBm - Min.: -5 dBm	- Max.: 0 dBm - Min.: -8 dBm
Input (RX) Optical Power	—	- Max.: 0 dBm - Min.: -11.5 dBm	- Max.: 0 dBm - Min.: -14.5 dBm
Sensitivity	—	-11.5 dBm	-14.5 dBm
Cable Type	CAT.6A	Multi-mode 50/125 um or 62.5/125 um fiber	Single-mode 9/125 um fiber
Power	3.3 V	3.3 V	3.3 V
Maximum Input Current	780 mA	300 mA	300 mA
Minimum Power Budget	—	6.5 dB	9.5 dB
Maximum Power Budget	—	10.5 dB	14.5 dB
Heat Generated	—	2.376 kJ/h	4.158 kJ/h
MTBF (Hours)	217,186	213,975	207,861
Digital Diagnostics Monitoring	—	—	—
Operating Temperature	0 to 60 °C	0 to 70 °C	0 to 70 °C
Storage Temperature	-40 to 85 °C	-40 to 85 °C	-40 to 85 °C
Operating Humidity	5 to 95%	5 to 95%	5 to 95%
Storage Humidity	5 to 95%	5 to 95%	5 to 95%
Dimensions (W x D x H)	13.7 x 68 x 8.5 mm (0.54 x 2.68 x 0.33 inches)	13.7 x 55.4 x 8.5 mm (0.53 x 2.18 x 0.33 inches) Compliant with SFF8432	13.7 x 55.4 x 8.5 mm (0.53 x 2.18 x 0.33 inches) Compliant with SFF8432
Weight	20 g (0.04 lbs)	20 g (0.04 lbs)	20 g (0.04 lbs)
Bail Latch Color	Gold	Beige	Blue
EMI	FCC Class B, ICES-003 Class B, CE Class B	FCC Class B, ICES-003 Class B, CE Class B	FCC Class B, ICES-003 Class B, CE Class B
Safety	LVD	LVD	LVD

DEM-400 Series 10G SFP+/Ethernet Transceivers

	DEM-433XT	DEM-434XT	DEM-435XT
Standard Compliance	• IEEE-802.3ae • 10GBASE-ER	• IEEE-802.3ae • 10GBASE-ZR	• IEEE802.3ae • IEEE-802.3aq • 10GBASE-LRM
Form Factor Type	SFP+	SFP+	SFP+
Fibre Channel FC-PI Standard	N/A	1200-SM-LL-L 10G Fiber Channel	N/A
Fiber Media Support	Single-Mode	Single-Mode	Multi-Mode
Distance Capacity	40 km	80 km	• 62.5/125 um, OM1: 100 m • 50 um, OM2, 500MHz-km: 220 m • 50 um, OM3, 2000MHz-km: 220 m • 50 um, OM4, 2000MHz-km: 220 m
Hot Pluggable	✓	✓	✓
MSA Compliant	✓	✓	✓
RoHS Compliant	✓	✓	✓
Speed	10 Gbps	10 Gbps	10 Gbps
Connector	Duplex LC Connector	Duplex LC Connector	Duplex LC Connector
Single/Bi-Directional	Single Direction	Single Direction	Single Direction
Wavelength	1550 nm	1550 nm	1310 nm
Output (TX) Optical Power	• Max.: 4 dBm • Min.: -2 dBm	• Max.: 5 dBm • Min.: 0 dBm	• Max.: 0 dBm • Min.: -5 dBm
Input (RX) Optical Power	• Max.: 0 dBm • Min.: -15 dBm	• Max.: -8 dBm • Min.: -22 dBm	• Max.: 0 dBm • Min.: -12 dBm
Sensitivity	-15 dBm	-22 dBm	-12 dBm
Cable Type	Single-mode 9/125 um fiber	Single-mode 9/125 um fiber	Multi-mode 50/125 um or 62.5/125 um fiber
Power	3.3 V	3.3 V	3.3 V
Maximum Input Current	300 mA	300 mA	300 mA
Minimum Power Budget	13 dB	22 dB	7 dB
Maximum Power Budget	19 dB	27 dB	12 dB
Heat Generated	6.118 kJ/h	7.05 kJ/h	4.158 kJ/h
MTBF (Hours)	213,975	207,861	213,975
Digital Diagnostics Monitoring	—	—	—
Operating Temperature	0 to 70 °C	0 to 70 °C	0 to 70 °C
Storage Temperature	-40 to 85 °C	-40 to 85 °C	-40 to 85 °C
Operating Humidity	5 to 95%	5 to 95%	5 to 95%
Storage Humidity	5 to 95%	5 to 95%	5 to 95%
Dimensions (W x D x H)	13.7 x 55.4 x 8.5 mm (0.53 x 2.18 x 0.33 inches) Compliant with SFF8432	13.7 x 55.4 x 8.5 mm (0.53 x 2.18 x 0.33 inches) Compliant with SFF8432	13.7 x 55.4 x 8.5 mm (0.53 x 2.18 x 0.33 inches) Compliant with SFF8432
Weight	20 g (0.04 lbs)	20 g (0.04 lbs)	20 g (0.04 lbs)
Bail Latch Color	Red	White	Blue
EMI	FCC Class B, ICES-003 Class B, CE Class B	FCC Class B, ICES-003 Class B, CE Class B	FCC Class B, ICES-003 Class B, CE Class B
Safety	LVD	LVD	LVD

DEM-400 Series 10G SFP+/Ethernet Transceivers

DEM-436XT-BXD		DEM-436XT-BXU
Standard Compliance	• IEEE-802.3ae • 10GBASE-LR	• IEEE-802.3ae • 10GBASE-LR
Form Factor Type	SFP+	SFP+
Fibre Channel FC-Pi Standard	1200-SM-LL-L 10G Fiber Channel	1200-SM-LL-L 10G Fiber Channel
Fiber Media Support	Single-Mode	Single-Mode
Distance Capacity	20 km	20 km
Hot Pluggable	✓	✓
MSA Compliant	✓	✓
RoHS Compliant	✓	✓
Speed	10 Gbps	10 Gbps
Connector	Simplex LC Connector	Simplex LC Connector
Single/Bi-Directional	WDM Bi-directional	
Wavelength	TX: 1330 nm, RX: 1270 nm	TX: 1270 nm, RX: 1330 nm
Output (TX) Optical Power	• Max.: 0 dBm • Min.: -5 dBm	• Max.: 0 dBm • Min.: -5 dBm
Input (RX) Optical Power	• Max.: 0 dBm • Min.: -13 dBm	• Max.: 0 dBm • Min.: -13 dBm
Sensitivity	-13 dBm	-13 dBm
Cable Type	Single-mode 9/125 um fiber	Single-mode 9/125 um fiber
Power	3.3 V	3.3 V
Maximum Input Current	300 mA	300 mA
Minimum Power Budget	8 dB	8 dB
Maximum Power Budget	13 dB	13 dB
Heat Generated	4.158 kJ/h	4.158 kJ/h
MTBF (Hours)	207,861	207,861
Digital Diagnostics Monitoring	—	—
Operating Temperature	0 to 70 °C	0 to 70 °C
Storage Temperature	-40 to 85 °C	-40 to 85 °C
Operating Humidity	5 to 95%	5 to 95%
Storage Humidity	5 to 95%	5 to 95%
Dimensions (W x D x H)	13.7 x 55.4 x 8.5 mm (0.53 x 2.18 x 0.33 inches) Compliant with SFF8432	13.7 x 55.4 x 8.5 mm (0.53 x 2.18 x 0.33 inches) Compliant with SFF8432
Weight	20 g (0.04 lbs)	20 g (0.04 lbs)
Bail Latch Color	Blue	Gray
EMI	FCC Class B, ICES-003 Class B, CE Class B	FCC Class B, ICES-003 Class B, CE Class B
Safety	LVD	LVD

DEM-400 Series 10G SFP+/Ethernet Transceivers

Order Information	
Part Number	Description
DEM-410T	10GBASE-T Cat.6A 30m RJ45 Transceiver
DEM-431XT	10BASE-SR Multi-Mode 300m (50/125 μm) SFP+ Transceiver
DEM-432XT	10GASE-LR Single-Mode 10km SFP+ Transceiver
DEM-433XT	10GBASE-ER Single-Mode 40km SFP+ Transceiver
DEM-434XT	10GBASE-ZR Single-Mode 80km SFP+ Transceiver
DEM-435XT	10GBASE-LRM Multi-Mode 100m (62.5/125 um) SFP+ Transceiver
DEM-436XT-BXD	10GBASE-LR Single-Mode 20km (TX-1330 nm/ RX-1270 nm) SFP+ Transceiver
DEM-436XT-BXU	10GBASE-LR Single-Mode 20km (TX-1270 nm/ RX-1330 nm) SFP+ Transceiver

¹ DEM-436XT-BXD and DEM-436XT-BXU models only.

Actual performances may vary due to settings, cabling, temperature, network configuration, interface, device compatibility, environmental and on-site conditions, and other similar factors. References to power capability, signal or processing speed, signal range or distance, data encryption, storage capacity, display properties, or other performance metrics are based on optimal conditions derived from industry standards and provided for informational purposes only. Specifications may be subject to change without prior notice.