

## **Product Highlights**

#### **Covers Vast Distances**

Support for maximum cable lengths of between 550 meters and 80 kilometers<sup>1</sup> is ideal for businesses spanning multiple premises

#### **High Performance**

Full duplex 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-300 Series**

## **Gigabit SFP Transceivers**

#### **Features**

- Small Form factor Pluggable (SFP)
- Multi-Source Agreement (MSA) specification compliant
- IEEE 802.3z standard
- Supports cable distances of up to 100 m / 550 m / 2 km / 10 km / 40 km / 50 km / 80km¹
- Hot pluggable
- FDA, CDRH, TUV Laser Eye safety certified
- TTL signal detect indicator
- Metal enclosure for lower EMI

D-Link Gigabit SFP Transceivers plug into Gigabit and Fast Ethernet switches via their GBIC slots. They allow for the expansion of Gigabit Ethernet networks by providing high-speed connections over a fiber-optic or twisted-pair cable. The fiber-optic transceivers have standard duplex LC connectors to provide maximum compatibility. They are hot pluggable and Small Form Factor Pluggable (SFP) compliant with the Multi-Source Agreement (MSA) specification.

## Small Form Pluggable (SFP) Package

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

#### Multiple Applications

Applications of the DEM-300 Series fiber transceivers include distributed multi-processing, Gigabit switch cascading, high-speed I/O file transfer, bus extension application, and channel extender/data storage. This versatility is invaluable for an expanding network, and helps the infrastructure grow with the business.

### Hot Pluggable

All D-Link transceivers are hot pluggable. You can connect a transceiver while the system is powered on without causing any issues, and easily swap one for another without having to reboot the switch each time. This permits modules to be added or removed without interrupting the network, facilitating maintenance and greatly reducing downtime.



# **DEM-300 Series Gigabit SFP Transceivers**

Technical Specifications						
	DEM-310GT DEM-311GT		DEM-312GT2			
Transceiver Type	• SFP	• SFP	• SFP			
Fiber Media Support	Single-Mode	Multi-Mode	• Multi-Mode			
Speed	• 1.25 Gbps	• 1 Gbps	• 1Gbps			
Distance	• 10 km	• 550 m	• 62.5/125 um fiber: 1 km • 50/125 um fiber: 2 km			
Compliant Standard	• IEEE802.3z 1000BASE-LX	• IEEE802.3z 1000BASE-SX	• IEEE802.3z 1000BASE-SX			
Connector	Duplex LC connector	Duplex LC connector	Duplex LC connector			
Single/Bi Direction	Single-direction	Single-direction	Single-direction			
Wavelength	• 1310 nm	• 850 nm	• 1310 nm			
Cable Type	Single-mode 9 um fiber	Multi-mode 50 um or 62.5 um fiber     Multi-mode 50/125um or 62.5/12 fiber				
Power Supply	• 3.3 V	• 3.3 V	• 3.3 V			
Hot Pluggable	✓	✓	√			
MSA Compliant	✓	✓	√			
RoHS Compliant	✓	✓	√			

	DEM-314GT	DEM-315GT	DGS-712	
Transceiver Type	• SFP	• SFP	• RJ45	
Fiber Media Support	Single-Mode	Single-Mode	• N/A	
Speed	• 1.25 Gbps	• 1 Gbps	• 1 Gbps	
Distance	• 50 km	• 80 km	• 100 m	
Compliant Standard	• IEEE802.3z 1000BASE-LHX	• IEEE802.3z 1000BASE-ZX	• IEEE 802.3ab 1000BASE-T	
Connector	Simplex LC connector	Simplex LC Connector	• RJ45	
Single/Bi Direction	WDM bi-direction	WDM bi-direction	• N/A	
Wavelength	• 1550 nm	• 1550 nm	• N/A	
Cable Type	Single-mode 9 um fiber	Single-mode 9 um fiber	• Cat5, Cat5e, Cat6	
Power Supply	• 3.3 V	• 3.3 V	• 3.3 V	
Hot Pluggable	✓	✓	✓	
MSA Compliant	✓	✓	✓	
RoHS Compliant	✓	✓	✓	

## **DEM-300 Series Gigabit SFP Transceivers**

	DEM-330T	DEM-330R	DEM-331T	DEM-331R	
Transceiver Type	• SFP	• SFP	• SFP	• SFP	
Fiber Media Support	Single-Mode	Single-Mode	Single-Mode	Single-Mode	
Speed	• 1.25 Gbps	• 1.25 Gbps	• 1.25 Gbps	• 1.25 Gbps	
Distance	• 10 km	• 10 km	• 40 km	• 40 km	
Compliant Standard	• IEEE802.3ah 1000BASE-BX-D	• IEEE802.3ah 1000BASE-BX-U	• IEEE802.3ah 1000BASE-BX-D	• IEEE802.3ah 1000BASE-BX-U	
Connector	Simplex LC connector	Simplex LC connector	Simplex LC connector	Simplex LC connector	
Single/Bi Direction	WDM bi-direction	WDM bi-direction	Bi-direction	Bi-direction	
Wavelength	• Tx: 1550 nm • Rx: 1310 nm	• Tx: 1310 nm • Rx: 1550 nm	• Tx: 1550nm • Rx: 1310nm	• Tx: 1310 nm • Rx: 1550 nm	
Cable Type	• Single-mode 9/125 um fiber	• Single-mode 9/125 um fiber	• Single-mode 9/125 um fiber	• Single-mode 9/125 um fiber	
Power Supply	• 3.3 V	• 3.3 V	• 3.3 V	• 3.3 V	
Hot Pluggable	√	✓	✓	✓	
MSA Compliant	✓	✓	✓	✓	
RoHS Compliant	✓	✓	✓	✓	
Order Information					
Part Number	Description	Description			
DEM-310GT	1000BASE-LX Single-Mode 10Kl	1000BASE-LX Single-Mode 10KM SFP Transceiver			
DEM-311GT	1000BASE-SX Multi-Mode 550N	1000BASE-SX Multi-Mode 550M SFP Transceiver			
DEM-312GT2	1000BASE-SX Multi-Mode 2KM				
DEM-314GT	1000BASE-LHX Single-Mode 50				
DEM-315GT	1000BASE-ZX Single-Mode 80K	1000BASE-ZX Single-Mode 80KM SFP Transceiver			
DEM-330T	1000BASE-BX-D Single-Mode 10				
DEM-330R	1000BASE-BX-U Single-Mode 10				
DEM-331T	1000BASE-BX-D Single-Mode 40				
DEM-331R	1000BASE-BX-U Single-Mode 40				
DGS-712	1000BASE-T Copper 100M SFP T	1000BASE-T Copper 100M SFP Transceiver			

<sup>&</sup>lt;sup>1</sup> Distance capacity dependent on model.
Updated 2014/04/03

