

DATA SHEET

# CISCO 100BASE-FX SFP FAST ETHERNET INTERFACE CONVERTER ON GIGABIT SFP PORTS

The Cisco<sup>®</sup> 100BASE-FX Small Form-Factor Pluggable (SFP) Fast Ethernet Interface Converter (GLC-GE-100FX=) is a hotswappable device that plugs into a Gigabit Ethernet SFP port on Cisco Catalyst<sup>®</sup> 3750 Series, 3560 Series, and 2970 Series switches. The Cisco SFP provides full-duplex 100-Mbps connectivity between switches over multimode fiber (MMF) infrastructures. It offers investment protection and an easy migration path for customers moving to Gigabit Ethernet connections in the future.

The 100BASE-FX SFP operates on ordinary multimode fiber optical link spans of up to 2 kilometers (km) in length. Customers implementing Cisco 100BASE-FX SFP can use 1000BASE-X SFPs in the future (including SX, LX/LH, ZX, and coarse wavelength-division multiplexing SFPs).



# **TECHNICAL SPECIFICATIONS**

# **Platform Support**

The Cisco 100BASE-FX SFP on Gigabit SFP ports is supported on Cisco Catalyst 3750, 3560, and 2970 series switches.

# **Connectors and Cabling**

Connectors: Dual LC connector

Table 1 shows cabling specifications for the 100BASE-FX SFP installed on a Gigabit Ethernet SFP port. The minimum cable distance is 6.5 feet (2 meters [m]).

### Table 1. SFP Port Cabling Specifications

| SFP           | Wave | elength ( | nm)  | Fiber Type | Core Size (micron) | Modal Bandwidth (MHz/km) | Cable Length   |
|---------------|------|-----------|------|------------|--------------------|--------------------------|----------------|
| GLC-GE-100FX= | Min  | Тур       | Max  | MMF        | 62.5               | 500                      | 2 km (6562 ft) |
|               | 1270 | 1300      | 1380 |            | 62.5               |                          |                |
|               |      |           |      |            | 50.0               |                          |                |
|               |      |           |      |            | 50.0               |                          |                |

#### Standards

The Cisco 100BASE-FX SFP is compatible with standards as specified in IEEE 802.3z.

#### Table 2. Fiber Loss Budgets for 100BASE-FX-SFP on Gigabit Ethernet SFP Ports

| SFP                      | Туре       | Cabling         | Transm | it (dBm) | Receive (dBm) |       |
|--------------------------|------------|-----------------|--------|----------|---------------|-------|
|                          |            |                 | Min    | Max      | Min           | Тур   |
| GLC-GE-100FX= 100BASE-F2 | 100BASE EX | 50/125-micron   | -23.5  | -14      | -33.5         | -11.8 |
|                          |            | 62.5/125-micron | -20    | -14      | -33.5         | -11.8 |

### Dimensions

• Maximum dimensions (HxWxD): 0.39 x 2.23 x 0.54 in. (9.80 x 56.70 x 13.8 mm)

## **Environmental Conditions and Power Requirements**

- Operating temperature range: 0 to 45 degrees C
- Storage temperature range: -40 to 80 degrees C
- Predicted mean time between failure (MTBF): 12,820,512 hours
- Power consumption: 1.5 W

#### Table 3. Electrical Power Interface

| Parameter      | Symbol | Minimum | Typical | Maximum | Units |
|----------------|--------|---------|---------|---------|-------|
| Supply Current | ls     | -       | 405     | 450     | mA    |
| Surge Current  | Isurge | -       | 350     | -       | mA    |
| Input Voltage  | Vcc    | 3.315   | 3.3     | 3.465   | V     |

#### Warranty

- Standard warranty: 90 days
- Extended warranty (optional): Available under a Cisco SMARTnet<sup>®</sup> support contract

# **Ordering Information**

| SFP  | Product Number |
|--|----------------|
| Cisco 100BASE-FX SFP for Gigabit SFP ports | GLC-GE-100FX=  |

# **Regulatory and Standards Compliance**

• IEC 60825-1



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