

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

The Cisco® 100BASE-FX Small Form-Factor Pluggable (SFP) Fast Ethernet Interface Converter (GLC-GE-100FX=) is a hot-swappable device that plugs into a Gigabit Ethernet SFP port on Cisco Catalyst® 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	Wavelength (nm)			Fiber Type	Core Size (micron)	Modal Bandwidth (MHz/km)	Cable Length
	Min	Typ	Max				
GLC-GE-100FX=	1270	1300	1380	MMF	62.5	500	2 km (6562 ft)
					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	Type	Cabling	Transmit (dBm)		Receive (dBm)	
			Min	Max	Min	Typ
GLC-GE-100FX=	100BASE-FX	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	Is	-	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® 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



#### **Corporate Headquarters**

Cisco Systems, Inc.  
170 West Tasman Drive  
San Jose, CA 95134-1706  
USA  
www.cisco.com  
Tel: 408 526-4000  
800 553-NETS (6387)  
Fax: 408 526-4100

#### **European Headquarters**

Cisco Systems International BV  
Haarlerbergpark  
Haarlerbergweg 13-19  
1101 CH Amsterdam  
The Netherlands  
www-europe.cisco.com  
Tel: 31 0 20 357 1000  
Fax: 31 0 20 357 1100

#### **Americas Headquarters**

Cisco Systems, Inc.  
170 West Tasman Drive  
San Jose, CA 95134-1706  
USA  
www.cisco.com  
Tel: 408 526-7660  
Fax: 408 527-0883

#### **Asia Pacific Headquarters**

Cisco Systems, Inc.  
168 Robinson Road  
#28-01 Capital Tower  
Singapore 068912  
www.cisco.com  
Tel: +65 6317 7777  
Fax: +65 6317 7799

Cisco Systems has more than 200 offices in the following countries and regions. Addresses, phone numbers, and fax numbers are listed on **the Cisco Web site at [www.cisco.com/go/offices](http://www.cisco.com/go/offices).**

Argentina • Australia • Austria • Belgium • Brazil • Bulgaria • Canada • Chile • China PRC • Colombia • Costa Rica • Croatia • Cyprus • Czech Republic • Denmark • Dubai, UAE • Finland • France • Germany • Greece • Hong Kong SAR • Hungary • India • Indonesia • Ireland Israel • Italy • Japan • Korea • Luxembourg • Malaysia • Mexico • The Netherlands • New Zealand • Norway • Peru • Philippines • Poland Portugal • Puerto Rico • Romania • Russia • Saudi Arabia • Scotland • Singapore • Slovakia • Slovenia • South Africa • Spain • Sweden Switzerland • Taiwan • Thailand • Turkey • Ukraine • United Kingdom • United States • Venezuela • Vietnam • Zimbabwe

Copyright © 2004 Cisco Systems, Inc. All rights reserved. CCIP, CCSP, the Cisco *Powered* Network mark, Cisco Unity, Follow Me Browsing, FormShare, and StackWise are trademarks of Cisco Systems, Inc.; Changing the Way We Work, Live, Play, and Learn, and iQuick Study are service marks of Cisco Systems, Inc.; and Aironet, ASIST, BPX, Catalyst, CCDA, CCDP, CCIE, CCNA, CCNP, Cisco, the Cisco Certified Internetwork Expert logo, Cisco IOS, the Cisco IOS logo, Cisco Press, Cisco Systems, Cisco Systems Capital, the Cisco Systems logo, Empowering the Internet Generation, Enterprise/Solver, EtherChannel, EtherSwitch, Fast Step, GigaStack, Internet Quotient, IOS, IP/TV, iQ Expertise, the iQ logo, iQ Net Readiness Scorecard, LightStream, Linksys, MGX, MICA, the Networkers logo, Networking Academy, Network Registrar, *Packet*, PIX, Post-Routing, Pre-Routing, RateMUX, Registrar, ScriptShare, SlideCast, SMARTnet, StrataView Plus, Stratm, SwitchProbe, TeleRouter, The Fastest Way to Increase Your Internet Quotient, TransPath, and VCO are registered trademarks of Cisco Systems, Inc. and/or its affiliates in the United States and certain other countries.

All other trademarks mentioned in this document or Web site are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (0402R) 204108.15\_ETMG\_KW\_10.04

