# **Alcatel-Lucent XFP Optical Modules**

## **Installation Guide**

#### Introduction

Alcatel-Lucent XFP modules, 10 Gbit small form-factor pluggable modules, are hot-swappable optical transceivers.

#### Alcatel-Lucent XFP Modules

- OAW-XFP-SR: conforms to the 10GBase-SR (short range) 10 Gigabit Ethernet standard
- OAW-XFP-LR: conforms to the 10GBase-LR (long range) 10 Gigabit Ethernet standard



Alcatel-Lucent tests and supports Alcatel-Lucent approved optics within their switch systems. Non-approved, third party optics are not tested or supported; therefore, Alcatel-Lucent does not guarantee proper functionality of non-approved, third party optics when used in an Alcatel-Lucent system. For a complete list of Alcatel-Lucent approved optics, contact your Alcatel-Lucent sales representative. Alcatel-Lucent Approved XFP Modules are listed on page 1 of this guide.

### **Minimum Software Requirements and Platform Support**

Table 1 lists minimum software requirements and platform support for each Alcatel-Lucent XFP module.

Table 1 Alcatel-Lucent XFP Compatibility Chart

Alcatel-Lucent XFP Module	Minimum AOS-W Software Requirement	Alcatel-Lucent Platform Support
OAW-XFP-SR	AOS-W 3.2.0	OmniAccess Supervisor Card III
OAW-XFP-LR	AOS-W 3.2.0	OmniAccess Supervisor Card III

#### **Alcatel-Lucent Approved XFP Modules**

Table 2 Alcatel-Lucent Approved XFP Modules

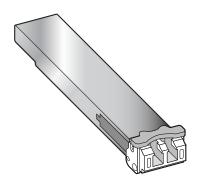
Alcatel- Lucent XFP Module	Alcatel-Lucent Approved Third Party Manufacturer	Third Party Manufacturer Part Number
OAW-XFP-SR	Fiberxon, Inc.	FTM-83X0C-X03G
OAW-XFP-LR	Fiberxon, Inc.	FTM-33X1C-X10G

0510357-01 | October 2007

### **Specifications**

Figure 1 shows the physical form factor of Alcatel-Lucent XFP modules.

Figure 1 XFP Module Form Factor



#### **OAW-XFP-SR**

Table 3 describes the specifications for the OAW-XFP-SR module.

 Table 3 OAW-XFP-SR Specifications

Parameter	Specification	
Connector Type	LC fiber optic	
Wavelength	850 nm	
Rx Power	-1 to -11.1 dBm	
Tx Power	-7.3 to -1.0 dBm	
Distance	62.5 μm core	~30 m
	50 μm core – 500 MHz/km	~82 m
	50 μm core – 2000 MHz/km	~300 m

#### **OAW-XFP-LR**

 ${\bf Table~4~describes~the~specifications~for~the~OAW-XFP-LR~module.}$ 

Table 4 OAW-XFP-LR Specifications

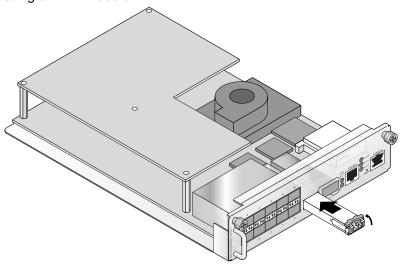
Parameter	Specification	
Connector Type LC fiber optic		
Wavelength	1310 nm nominal, < 1 nm sp	ectral width
Rx Power	0.5 to -12.6 dBm	
Tx Power	-8.2 to 0.5 dBm	
Distance	9 μm core	~10 km

#### **XFP Installation**

To install an XFP module:

- 1. Use standard ESD precautions when installing an XFP module.
- 2. Slide the XFP module, top side facing upward, into a 10GBase-X port until a connection is made and an audible click is heard (see Figure 2).
- 3. Lock the XFP in place by moving the latch on the module to an upright position, facing the top of the module (see Figure 2).

Figure 2 Installing an XFP Module

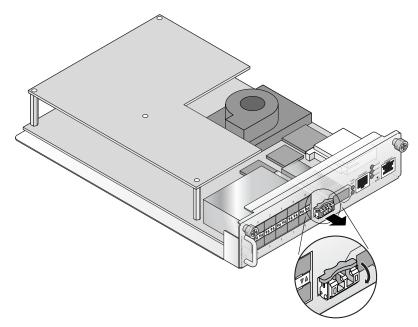


#### **XFP Removal**

To remove an XFP module:

- 1. Use standard ESD precautions when removing an XFP module.
- 2. Open and release the latch on the XFP module (see Figure 3).
- 3. Pull and remove the module from the port (see Figure 3).

Figure 3 Removing an XFP Module



#### Safety and Regulatory Compliance

Alcatel-Lucent provides a multi-language document containing country specific restrictions and additional safety and regulatory information for Alcatel-Lucent hardware products. The *Alcatel-Lucent Safety and Regulatory Addendum* can be viewed or downloaded from the following location: <a href="https://service.esd.alcatel-lucent.com">https://service.esd.alcatel-lucent.com</a>.





Use of controls or adjustments of performance or procedures other than those specified in this manual may result in hazardous radiation exposure.

This product complies with 21 CFR Chapter 1, Subchapter J, Part 1040.10, and IEC 60825-1: 1993, A1: 1997, A2: 2001, IEC 60825-2: 2000.

For continued compliance with the above laser safety standards, only approved Class 1 modules from our approved vendors should be installed in Alcatel-Lucent products.

#### **Proper Disposal of Alcatel-Lucent Equipment**

For the most current information on Global Environmental Compliance and Alcatel-Lucent products please see our website at www.alcatel-lucent.com.

#### **Waste of Electrical and Electronic Equipment**



Alcatel-Lucent products at end of life are subject to separate collection and treatment in the EU Member States, Norway, and Switzerland and therefore are marked with the symbol shown at the left (crossed-out wheelie bin). The treatment applied at end of life of these products in these countries shall comply with the applicable national laws of countries implementing Directive 2002/96EC on Waste of Electrical and Electronic Equipment (WEEE).

#### **European Union RoHS**



Alcatel-Lucent products also comply with the EU Restriction of Hazardous Substances Directive 2002/95/EC (RoHS). EU RoHS restricts the use of specific hazardous materials in the manufacture of electrical and electronic equipment.

Specifically, restricted materials under the RoHS Directive are Lead (including Solder used in printed circuit assemblies), Cadmium, Mercury, Hexavalent Chromium, and Bromine. Some Alcatel-Lucent products are subject to the exemptions listed in RoHS Directive Annex 7 (Lead in solder used in printed circuit assemblies). Products and packaging will be marked with the "RoHS" label shown at the left indicating conformance to this Directive.

#### **China RoHS**



Alcatel-Lucent products also comply with China environmental declaration requirements and are labeled with the "EFUP e" label shown at the left.

### **Contacting Alcatel-LucentAlcatel-Lucent**

Web Site Support	
Main Site	http://www.alcatel-lucent.com/wps/portal/enterprise
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