SFP MODULE

SFP modules for Ethernet over fiber

DESCRIPTION

Small Form-Factor Pluggables (SFPs) are compact, standardised modular, hot-pluggable, optical or electrical transceivers for Gigabit Ethernet (1000Base-FX) or Fast Ethernet (100Base-FX).

FEATURES

- Small Form-Factor Pluggable (SFP)
- Compliant with IEEE 802.3 and MSA
- Hot-pluggable
- Dual LC connector for dual fiber SFPs
- Single LC or SC connector for single fiber SFPs
- Compatible with 100Mb or 1Gb networks
- Single power supply 3.3 V
- 100 Mb SFPs are compatible with Siqura products



Description

Small Form-Factor Pluggables (SFPs) are compact, standardised modular, hot-pluggable, optical or electrical transceivers for Gigabit Ethernet (1000Base-FX) or Fast Ethernet (100Base-FX). The form factor and electrical interface are specified by a multisource agreement (MSA). Siqura XSNet™ SFPs are compliant with the MSA and intended to be compliant with all other equipment that is designed according this MSA.

Models

The XSNet™ SFPs are available in a wide range of models for multimode or single-mode optical fiber, 100 Mb or 1000 Mb speed rate, various distances, and one or two fibers. There are also two electrical RJ-45 SFPs available (100 Mb or 1000 Mb speed rate). These are applied when an SFP slot must be connected to an electrical CAT5/6 cable.

Speed grades

The SFPs come in two speed grades: 100 Mb and 1000 Mb. Though the practice of using 1000 Mb SFPs in 100 Mb speed slots is fairly accepted – in most cases without problems – correct functioning cannot be guaranteed as the 1000 Mb SFP design is made primarily for 1000 Mb slots. Best practise is to use 100 Mb SFPs in 100 Mb slots. Even if a 1000 Mb SFP can run at 100 Mb, the combination of a 1000 Mb SFP (running at 100 Mb) and a 100 Mb SFP is NOT possible. The optical power windows (optical transmitter output power versus minimum optical receiver input) are totally different for 1000 Mb and 100 Mb SFPs.

Compatibility

The 100 Mb range of Siqura XSNet™ SFPs is optically compatible with the Siqura XSNet Media Converter range. With this variety of models, any network solution can be realized, while maintaining a competitive price level. XSNet SFPs are selected for use with many of Siqura's SFP-ready series cameras, as well as XSNet™ series media converters and switches with SFP slots.

High Capacity

For high-capacity special applications, a range of CWDM SFPs is available on request. Contact your local sales representative for more information.

Electrical	
Interface(s)	Small Form-Factor Pluggable (SFP) hot-pluggable
Standards	
IEEE 802.3u	100Base-TX, 100Base-FX Fast Ethernet specification
IEEE 802.3ab	1000Base-T Gbit/s Ethernet
IEEE 802.3z	1000Base-X Gbit/s Ethernet over Fiber Optic
MSA	Multi-Source Agreement compliant
Environmental	
Operating temperature	-40 °C to +85 °C (-40 °F to +185 °F)
Storage temperature	-40 °C to +85 °C (-40 °F to +185 °F)
Relative humidity	5% to 95% with no condensation
Powering	
Supply voltage	3.3 Vdc (3.1 - 3.5 Vdc)
Mechanical	
Housing	SFP according MSA (Multi-Source Agreement)
Connector	Electrical: Rj45; Fiber: LC or Dual LC
Ordering information	
SFP RJ45 100Mb	SFP, 100Mb SFP slot to 10/100Base-TX w/RJ45
SFP RJ45 1000Mb	SFP, 1Gb SFP slot to 10/100/1000Base-TX w/RJ45
SFP SM 13T15R 10km	Singlemode SFP, single LC (TX1310RX1550nm, 10km, 1Gb)
SFP SM 15T13R 10km	Singlemode SFP, single LC (TX1550RX1310nm, 10km, 1Gb)
SFP SM 13T15R 20km	Singlemode SFP, single LC (TX1310RX1550nm, 20km, 100Mb)
SFP SM 15T13R 20km	Singlemode SFP, single LC (TX1550RX1310nm, 20km, 100Mb)
SFP SM 1310 10km 1Gb	Singlemode SFP, dual LC (1310nm, 10km, 1Gb)
SFP SM 1310 20km 1Gb	Singlemode SFP, dual LC (1310nm, 20km, 1Gb)
SFP SM 1310 30km 100Mb	Singlemode SFP, dual LC (1310nm, 30km, 100Mb)
SFP MM 13T15R 2km	Multimode SFP, single LC (TX1310,RX1550nm, 2km, 100Mb)
SFP MM 15T13R 2km	Multimode SFP, single LC (TX1550,RX1310nm, 2km, 100Mb)
SFP MM 1310 2km 100Mb	Multimode SFP, dual fiber, dual LC (1310nm, 2km, 100Mb)
SFP MM 1310 2km 1000Mb	Multimode SFP, dual fiber, dual LC (1310nm, 2km, 1000Mb)