

SFP Single Fiber 550m transceiver | Cisco Compatible 1G BX Ethernet Designed for OEM networks such as Cisco, HP, Juniper, Brocade, Alcatel etc.

#### **Datasheet**

# SFP Optical Transceiver Product Features

- Exclusive Japanese OSAs for Ultimate Reliability
- 1000BASE-BX Ethernet 11.5dB SFP
- 550m BX SFP for MMF @ 1.25Gbps
- 1310Tx 1550Rx FP Laser 550m SFP
- 0°C 70°C Temperature Extended/Industrial Available
- 2-Wire Interface Digital Diagnostic Monitoring (SFF-8724)
- Hot-swappable for SFP LC ports
- Extended 2 Years Warranty
- Tested and Certified in Brand Specific Networks and Target
  Applications
- Assembled Using Highest Quality Raw Components
- SFP MSA / IEEE Std 802.3 & ROHS

#### PSFP-11DB31K0P5



**Applications** 

- 1.25Gbps Gigabit Ethernet
- Fibre Channel 1x
- Optical Fast Ethernet
- Other Optical Links

#### **Description**

Platinum OEM Series PSFP-11DB31K0P5 is a Cisco Compatible Single Fiber BiDirectional 1000BASE-BX Ethernet SFP transceiver designed for long distance optical communications up to 550m with signaling rates up to 1.25Gbps.

OptoSpan Platinum OEM Series 1.25Gbps Single Fiber BiDirectional (BiDi) optical transceivers have undergone rigorous qualification and certification testing to provide End-to-End Compatibility using switching equipment from CISCO, BROCADE, JUNIPER, ALCATEL, HP (select models), NORTEL, EMC, QLOGIC and other OEMs.

All OptoSpan Platinum OEM Series long-reach SFP s are ROHS compliant, allow for real-time diagnostic monitoring as per SFF-8472 and designed to meet Multi-Source Agreement (MSA) standards for Single Fiber BiDirectional (BiDi) transceivers with LC interface.

#### Optical Budget Calculation for 550m Platinum OEM SFP Optical Transceiver

PSFP-11DB31K0P5	Distance: 550m				Fiber: 1310Tx - 1550Rx	
	Tx Min dBm	Tx Max dBm	Rx Min dBm	Rx Max dBm	Link Attenuation dB	Power Budget dB
Product Specifications	-9.5	-3	-21	-3		
Optical Calculation Results			-11.24	-5.24	1.24	11.5



# SFP Single Fiber 550m transceiver | Cisco Compatible 1G BX Ethernet General Specifications

Parameter	Unit	Min.	Тур.	Max
Absolute Maximum Ratings				
Maximum Supply Voltage	V	-0.5		3.6
Storage Temperature	oC	-40		+85
Case Operating Temperature	oC	0		70
Recommended Operating Condition				
Supply Voltage	V	3.15	3.3	3.45
Supply Current	mA			300
Data Rate	Gbps		1.25	

#### **Electrical Characteristics**

Parameter	Unit	Min.	Тур.	Max
Transmitter				
Differential Input Voltage Swing	mVpp	400		2000
Input Differential Impedance	ohm	85	100	115
Transmit Disable Voltage - High	V	2		Vcc
Transmit Disable Voltage - Low	V	0		0.8
Transmit Fault Voltage - High	V	2		Vcc+0.3
Transmit Fault Voltage - Low	V	0		0.5
Receiver				
Differential Output Voltage Swing	mVpp	370		2000
Differential Output Impedance	ohms	85	100	115
LOS Output Voltage - High	V	2		Vcc+0.3
LOS Output Voltage - Low	V	0		0.8



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#### **Optical Characteristics**

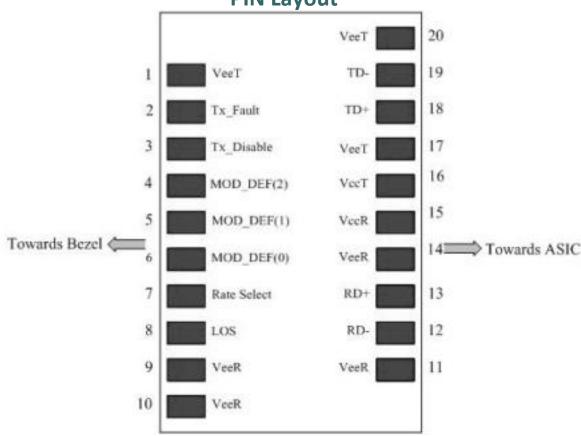
Parameter	Unit	Min.	Тур.	Max
	Transmitter			
Output Optical Power	dBm	-9.5		-3
Optical Extinction Ratio	dB	6		
Optical Wavelength	nm	1260	1310	1360
Spectral Width	nm			4
Side Mode Suppression Ratio	dB			
	Receive	<u> </u>		
Optical Center Wavelength	nm	1500	1550	1580
Receiver Sensitivity @ 1.25	dBm	-21		-3
LOS DE-Assert	dBm			-23
LOS Assert	dBm	-45		

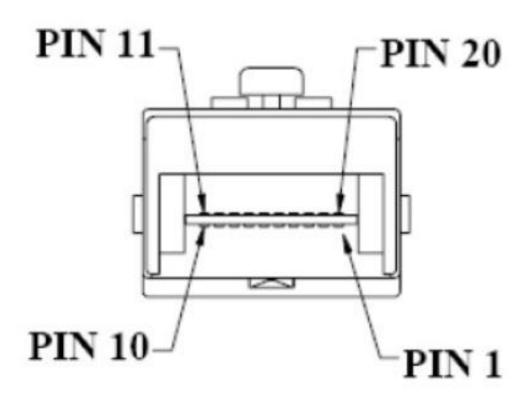
#### **Laser Safety**

This is a class 1 Laser Product according to IEC 60825-1:1993:+A1:1997+A2:2001. This product complies with 21 CFR 1040.10 and 1040 except for deviations pursuant to Laser Notice No. 50, dated July 26, 2001.



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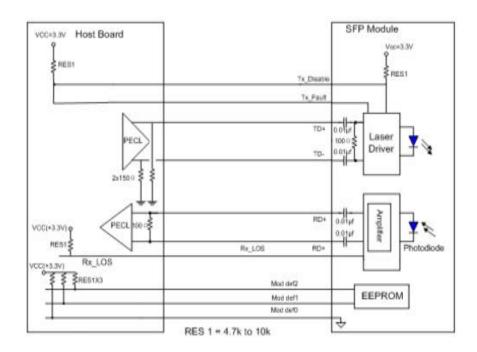


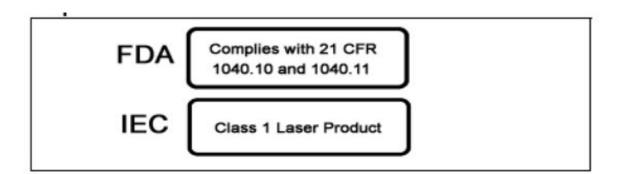
## SFP Single Fiber 550m transceiver | Cisco Compatible 1G BX Ethernet PIN Functions

Pin #	Name - Description
1	Transmitter Ground
2	Transmitter Fault Indication
3	Transmitter Disable
4	Module Definition 2
5	Module Definition 1
6	Module Definition 0
7	Not Connected
8	Loss of Signal
9	Receiver Ground
10	Receiver Ground
11	Receiver Ground
12	Inv. Received Data Out
13	Received Data Out
14	Receiver Ground
15	Receiver Power
16	Transmitter Power
17	Transmitter Ground
18	Transmit Data In
19	Inv. Transmit Data In
20	Transmitter Ground
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# SFP Single Fiber 550m transceiver | Cisco Compatible 1G BX Ethernet | Wechanical Layouts





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