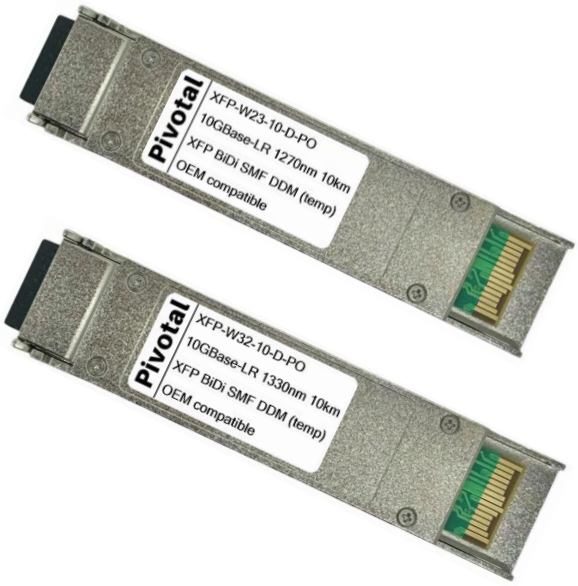
XFP-W23/W32-10-D

10GBASE, XFP, BiDi, SMF TRANSCEIVER 1270/1330nm & 1330/1270nm, 10km REACH, SIMPLEX LC CONNECTOR

Product Features

- Supports 9.95Gb/s to 11.3Gb/s data rates
- Hot-pluggable XFP footprint
- XFP-W23-10-D: 1270nm DFB Transmitter/ 1330nm Receiver
- XFP-W32-10-D: 1330nm DFB Transmitter/ 1270nm Receiver
- XFI Loopback Mode
- Power dissipation<2W
- Single + 3.3V Power Supply
- Up to 10km transmission on SMF
- 2-wire interface with integrated Digital Diagnostic monitoring
- EEPROM with Serial ID Functionality
- Compliant with XFP MSA with LC connector
- RoHS-6 Compliant (lead-free)
- Available operating temperature ranges:
  - Commercial: 0°C to 70°C
  - Industrial: -40°C to 85°C



Product Applications

- 10GBASE-BX 10.3125Gb/s Ethernet
- 10GBASE-BX 9.953Gb/s Ethernet
- SONET OC-192 SR-1

I. Maximum Ratings

Exceeding the limits below may damage the transceiver module permanently.

Parameter	Symbol	Min.	Typ.	Max.	Units
Storage Temperature	TS	-40		85	°C
Power Supply Voltage	Vcc	-0.3		4.0	V
Power Supply Input	Vcc	Vcc-0.3		Vcc+0.3	V
Relative Humidity	RH	5		95	%

II. Operating/Electrical Specifications

Parameter	Symbol	Min.	Typ.	Max.	Units	Notes
Case Operating Temperature	TC	0		+70	℃	Commercial
		-40		+85	℃	Industrial
Power Supply Current	Icc			600	mA	
Power Supply Voltage	Vcc	3.14	3.3	3.47	V	
Transmission Distance	TD			10	km	

III. Optical Characteristics

Parameter			Symbol	Min.	Typ.	Max.	Unit	Notes
Center Wavelength	XFP-W23-10-D	Tx	λc	1260	1270	1280	nm	
		Rx		1320	1330	1340		
	XFP-W32-10-D	Tx		1320	1330	1340		
		Rx		1260	1270	1280		
Data Rate				9.95	10.3125	11.3	Gbps	
Transmitter								
Average Launched Power			Pout	-5		0	dBm	
Average Launch power of OFF transmitter			Poff			-30	dBm	1
Side mode suppression ratio			SMSR	30			dB	
Spectrum Bandwidth(-20dB)			σ			1	nm	
Extinction Ratio			ER	3.5			dB	2
Output Eye Mask			Compliant with IEEE 802.3ae					2
Receiver								
Input Saturation Power (Overload)			Psat	0.5			dBm	3
Receiver Sensitivity			Psen			-15	dBm	3
LOS De-Assert			LOSD	-32			dBm	
LOS Assert			LOSA			-17	dBm	
LOS Hysteresis			LOSH	0.5		4	dB	

Notes:

1. The optical power is launched into SMF
2. Measured with RPBS 2^{31}-1 test pattern @10.3125Gbs
3. Measured with RPBS 2^{31}-1 test pattern @10.3125Gbs BER=<10^{-12}.

IV. Electrical Characteristics

Parameter	Symbol	Min.	Typ.	Max.	Unit	Notes
Total power supply current	Icc			600	mA	
Transmitter						
Differential Data Input Voltage	VDT	120		820	mVp-p	
Differential line input Impedance	RIN	85	100	115	oHm	
Transmitter Fault Output - High	VFaultH	2.4		Vcc	V	
Transmitter Fault Output - Low	VFaultL	-0.3		0.8	V	
Transmitter Disable Voltage - High	VDisH	2		Vcc+0.3	V	
Transmitter Disable Voltage - Low	VDisL	-0.3		0.8	V	
Receiver						
Differential Data Output Voltage	VDR	300		850	mVp-p	
Differential line Output Impedance	ROUT	80	100	120	Ohm	
Receiver LOS Pull up Resistor	RLOS	4.7		10	KOhm	
Data Output Rise/Fall time	tr/tf	20			ps	
LOS Output Voltage - High	VLOSH	2		Vcc	V	
LOS Output Voltage - Low	VLOSL	-0.3		0.4	V	

V. Ordering Information

Pivotal Part Number	Description
XFP-W23-10-D	XFP, BIDI, 1270TX/1330RXnm, LR SMF 10km 10G/OC-192 DDM, C-Temp
XFP-W23-10-DI	XFP, BIDI, 1270TX/1330RXnm, LR SMF 10km 10G/OC-192 DDM, I-Temp
XFP-W32-10-D	XFP, BIDI, 1330TX/1270RXnm, LR SMF 10km 10G/OC-192 DDM, C-Temp
XFP-W32-10-DI	XFP, BIDI, 1330TX/1270RXnm, LR SMF 10km 10G/OC-192 DDM, I-Temp

Notes:

1. Please contact sales for specific OEM Platform part numbers to fit your network.

Warranty
https://pivotaloptics.com/warranty/

Disclaimer
External physical characteristics are subject to variation. This may include, but is not limited to, external case designs, pull tab colors and/or shapes, removal latch styles or colors, and label sizes and placement. These variations do not affect the function or characteristics of the transceivers.