

SFPP-W23/W32-60-10GD

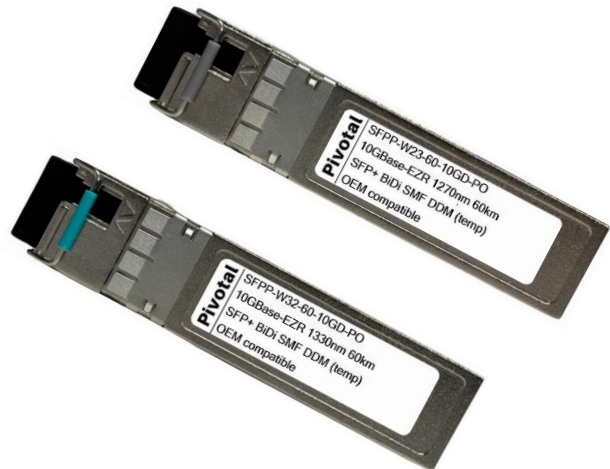
10GBASE, SFP+, EZR, BiDi, SMF TRANSCEIVER (BXU)1270/1330nm,
(BXD)1330/1270nm, 60km REACH, SIMPLEX LC CONNECTOR

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Product Features

- Up to 11.3Gb/s data links
- 1270nm DFB laser, 1330nm receiver
- 1330nm DFB laser, 1270nm receiver
- Up to 60km on 9/125µm SMF
- Hot-pluggable SFP+ footprint
- Compliant with SFP+ MSA Specification SFF-8431
- Single 3.3V Power supply and TTL Logic Interface
- LC Connector Interface
- Compliant with IEEE 802.3ae 10GBASE-ER
- Compliant with IEEE 802.3ae 10GBASE-EW
- Available operating temperature ranges:
 - Commercial: 0°C to 70°C
 - Industrial: -40°C to 85°C



Product Applications

- 10GBASE-ER/EW & 10G Ethernet
- OTN / CPRI
- Other optical links

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	-0.5		3.6	V

II. Operating Specifications

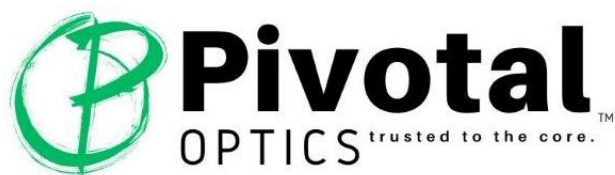
Parameter	Symbol	Min.	Typ.	Max.	Units	Notes
Case Operating Temperature	TC	0		+70	°C	Commercial
		-40		+85	°C	Industrial
Power Supply Voltage	VCC	3.15	3.3	3.45	V	
Surge Current	Isurge			+30	mA	
Power Supply current				430	mA	
Link Distance	D			60	km	9/125um

III. Optical and Electrical Characteristics

Parameter		Symbol	Min.	Typ.	Max.	Unit	Notes
Transmitter							
Centre Wavelength	λ_C		1260	1270	1280	nm	BXU
			1320	1330	1340		BXD
Spectral Width (-20db)	$\Delta\lambda$				1	nm	
Side Mode Suppression Ratio	SMSR		30			dB	
Average Output Power	Pout		1		6	dBm	1
Optical Extinction Ratio	ER		3.5			dB	
Data Input Swing Differential	VIN		180		850	mV	2
Input Differential Impedance	ZIN		90	100	110	Ω	
TX Disable	Disable		2.0		Vcc	V	
	Enable		0		0.8	V	
TX Fault	Fault		2.0		Vcc	V	
	Normal		0		0.8	V	
Receiver							
Center Wavelength	λ_c		1320	1330	1340	nm	BXU
			1260	1270	1280		BXD
Receiver Sensitivity	PIN				-20	dBm	3
Receiver Overload	Psat		-6			dBm	3
LOS Assert	LOSA		-35			dBm	
LOS De-Assert	LOSD				-21	dBm	
LOS Hysteresis	LOSH		0.5			dB	
Data Output Swing Differential			300		900	mV	4
LOS	High		2.0		Vcc	V	
	Low				0.8	V	

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Notes:

1. The optical power is launched into SMF.
2. PECL input, internally AC-coupled and terminated.
3. Measured with a PRBS 231-1 test pattern @10312Mbps, BER $\leq 1 \times 10^{-12}$.
4. Internally AC-coupled.

IV. Ordering Information

Pivotal Part Number	Description
SFPP-W23-60-10GD	SFP+, WDM BiDi 1270TX/1330RX, EZR SMF 60km, 10G DDM, C-Temp
SFPP-W23-60-10GDI	SFP+, WDM BiDi 1270TX/1330RX, EZR SMF 60km, 10G DDM, I-Temp
SFPP-W32-60-10GD	SFP+, WDM BiDi 1330TX/1270RX, EZR SMF 60km, 10G DDM, C-Temp
SFPP-W32-60-10GDI	SFP+, WDM BiDi 1330TX/1270RX, EZR SMF 60km, 10G 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.