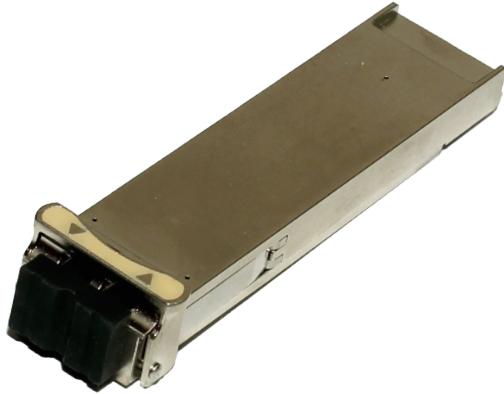




# 10GBASE-SR XFP Transceiver 10Gb/s 850nm MMF P/N 4SR0P0x-0850



## Description

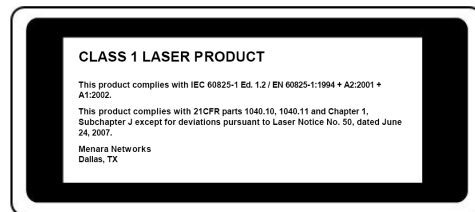
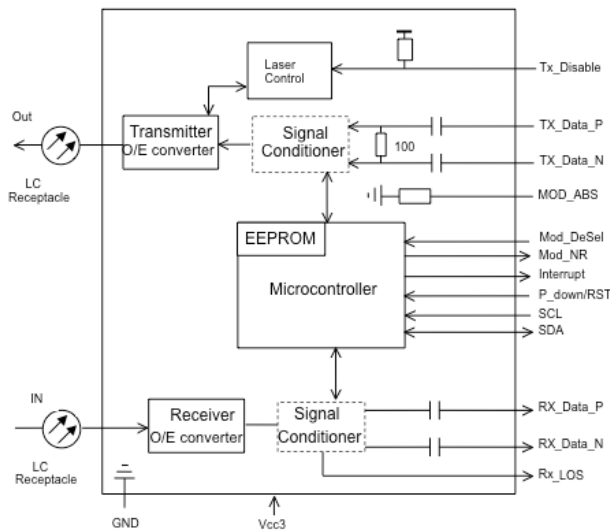
Menara Networks' 4SR0P0x-0850 transceivers are designed for use in 10Gb/s links up to 300m over Type A1a (50/125 μm multimode) fiber. The XFP module supports IEEE 802.3ae 10GBASE-SR and – SW applications along with 10G FC 1200-Mx-SN-I applications for Ethernet Switches or IP Router optical interfaces. Digital Optical Monitoring interfaces are provided via the SFP+ standards compliant I<sup>2</sup>C interface.

## Applications

- 10GBASE-SW/SR 10GEthernet
- 8GB/10GB Fibre Channel
- Ethernet Switch or IP Router Interconnect

## Features

- Hot-pluggable XFP footprint
- Support 10Gb/s bit rates
- 850 VCSEL Laser transmitter
- InGaAs PIN photodiode receiver
- Single 3.3V power supply
- Power dissipation < 1.5W
- 0°C to +70°C and -40°C to +85°C
- Industrial temperature options available
- Duplex LC fiber connectors
- IEEE 802.3ae 10GBASE-SR/SW
- 10G FC 1200-Mx-SN-I
- Full Digital Optical Monitoring
- Metal enclosure for lower EMI
- Complies with RoHS directive (2002/95/EC)
- Compliant with XFP Electrical and Mechanical MSA INF-8077
- Laser Class 1 IEC/CDRH compliant
- Links of 300m with multimode mode fiber (MMF) of maximum interconnect distances



### Transmitter E-O Characteristics

Parameter	Symbol	Min.	Typ.	Max.	Unit	Note
Operating Data Rate	-	9.95	10.3125	11.1	Gb/s	
Center Wavelength	$\lambda$	840	-	860	nm	
Spectral Width (-20dB)	$\Delta\lambda$			0.45	nm	
Average Optical Output Power	P <sub>o</sub>	-7.3	-	-1	dBm	1
OMA Output Power	OMA	-2.8	-1.5		dBm	
Extinction Ratio	E <sub>r</sub>	3.5			dB	
Transmitter and Dispersion Penalty	TDP			3.9	dB	
Transmitter Enable Voltage	V <sub>EN</sub>	GND	-	0.8	V	
Transmitter Disable Voltage	V <sub>DIS</sub>	2.0	-	V <sub>CC</sub> +0.3	V	
Differential data Inputs swing	V <sub>INPP</sub>	120	-	1000	mVp-p	2
Output Power After Disabled	-	-	-	-30	dBm	
Output Eye Diagram	Compliant with ITUT and IEEE					

Notes:

1. The optical power is launched into MMF
2. Internally AC coupled

### Receiver O-E Characteristics

Parameter	Symbol	Min.	Typ.	Max.	Unit	Note
Operating Data Rate	-	9.95	10.3125	11.1	Gb/s	
Operate Wavelength	-	840	-	860	nm	
Sensitivity in OMA	R <sub>Sen1</sub>			-11.1	dBm	3
Stressed Receiver Sensitivity (OMA)	R <sub>Sen2</sub>			-7.5	dBm	3
Saturation	P <sub>s</sub>	-1			dBm	3
LOS Asserted	LOS <sub>A</sub>	-25			dBm	
LOS De-Asserted	LOS <sub>D</sub>			-12	dBm	
LOS Hysteresis	-	0.5			dB	
Differential data outputs swing	V <sub>OUTPP</sub>	500	-	800	mV	4
LOS Low Voltage	V <sub>L-OUT</sub>	GND	-	0.5	V	
LOS High Voltage	V <sub>H-OUT</sub>	V <sub>CC</sub> -0.5	-	V <sub>CC</sub> -0.3	V	

Notes

3. Measured at 10.3125Gbps, PRBS 2<sup>31</sup>-1, NRZ, BER≤10<sup>-12</sup>
4. Internally AC coupled

### Ordering Information

Part Number	ROHS Compliant	Operating Case Temperature
4SR0P0x-0850	ROHS-6	0 ~ +70°C
4SR0P2x-0850		-40 ~ +85°C

x = J for Juniper  
x = C for Cisco  
x = A for Alcatel  
x = O for Cisco ONS



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