



S+RJ10-SKY

MikroTik® S+RJ10 Compatible 10/100/1000/2500/5000/10000NBase-T SFP+ Transceiver (Copper, 100/30m, RJ-45)

Product Description

This MikroTik® S+RJ10 compatible SFP+ transceiver provides 10/100/1000/2500/5000/10000NBase-T throughput up to 100m over a copper connection via a RJ-45 connector. This TX module supports 10/100/1000/2500/5000/10000NBase auto-negotiation and can be configured to fit your needs. Our transceiver is built to meet or exceed OEM specifications and is guaranteed to be 100% compatible with MikroTik®. It has been programmed, uniquely serialized, and tested for data-traffic and application to ensure that it will initialize and perform identically. All of our transceivers comply with Multi-Source Agreement (MSA) standards to provide seamless network integration. We stand behind the quality of our products and proudly offer a limited lifetime warranty.

Skylane's transceivers are RoHS compliant and lead-free.

Features:

- SFF-8432 Compliance
- RJ-45 Connector
- Commercial Temperature 0 to 70 Celsius
- Copper Media Type
- Hot Pluggable
- Excellent ESD Protection
- Metal with Lower EMI
- RoHS Compliant and Lead Free



Applications:

- 10GBase Ethernet
- Access and Enterprise

For your product safety, please read the following information carefully before any manipulation of the transceiver:



ESD

This transceiver is specified as ESD threshold 1kV for SFI pins and 2kV for all others electrical input pins, tested per MIL-STD-883G, Method 3015.4 /JESD22-A114-A (HBM). However, normal ESD precautions are still required during the handling of this module.



LASER SAFETY

This is a Class1 Laser Product according to IEC 60825-1:2007. This product complies with 21 CFR 1040.10 and 1040.11 except for deviations pursuant to Laser Notice No. 50, dated (June 24, 2007).

The optical ports of the module need to be terminated with an optical connector or with a dust plug in order to avoid contamination.

General Specifications

Parameter	Symbol	Min.	Typ.	Max.	Unit	Notes
Data Rate	DR		10		Gbps	1
Bit Error Rate	BER			10^{-12}		
Storage Temperature	Tstg	-40		85	°C	2
Supply Current	Icc		700	750	mA	3
Input Voltage	Vcc	3.14	3.3	3.46	V	
Maximum Voltage	V _{MAX}	-0.5		4	V	
Surge Current	I _{surge}			30	mA	
Power Consumption	P		2.3	2.6	W	

Notes:

1. IEEE 802.3ae.
2. Ambient temperature.
3. Test at 10Gbps rate using a 30m CAT 6A cable.

Pin Descriptions

Pin	Symbol	Name/Description	Notes
1	VeeT	Transmitter Ground (Common with Receiver Ground).	1
2	Tx_Fault	Transmitter Fault. Not Supported.	
3	Tx_Disable	Transmitter Disable. PHY is disabled on “high” or “open.”	2
4	SDA	2-Wire Serial Interface Data.	3
5	SCL	2-Wire Serial Interface Clock.	3
6	MOD_ABS	Module Absent. Grounded within the module.	3
7	RS0	No Connection Required.	
8	LOS	Loss of Signal Indication. “Logic 0” indicates normal operation.	
9	RS1	No Connection Required.	
10	VeeR	Receiver Ground (Common with Transmitter Ground).	1
11	VeeR	Receiver Ground (Common with Transmitter Ground).	1
12	RD-	Receiver Inverted Data Out. AC Coupled.	
13	RD+	Receiver Non-Inverted Data Out. AC Coupled.	
14	VeeR	Receiver Ground (Common with Receiver Ground).	1
15	VccR	Receiver Power Supply.	
16	VccT	Transmitter Power Supply.	
17	VeeT	Transmitter Ground (Common with Receiver Ground).	1
18	TD+	Transmitter Non-Inverted Data In. AC Coupled.	
19	TD-	Transmitter Inverted Data In. AC Coupled.	
20	VeeT	Transmitter Ground (Common with Receiver Ground).	1

Notes

1. The circuit ground is isolated from the module case.
2. Disabled: TDIS > 2V or open, enabled: TDIS < 0.8V.
3. Should be pulled up with 4.7kΩ to 10kΩ on the host board to a voltage between 2V and 3.6V.

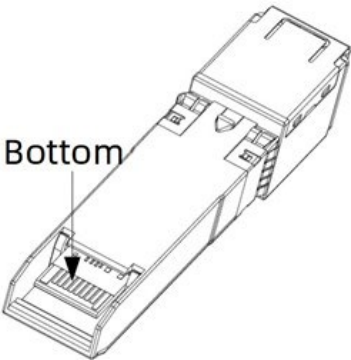
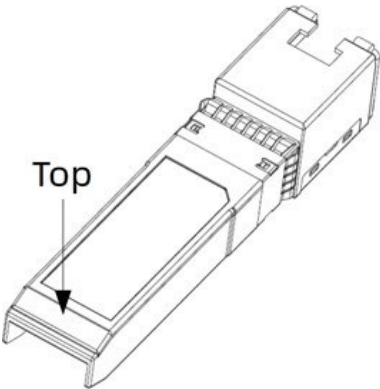
Pin-Out Details

Top View Of Board

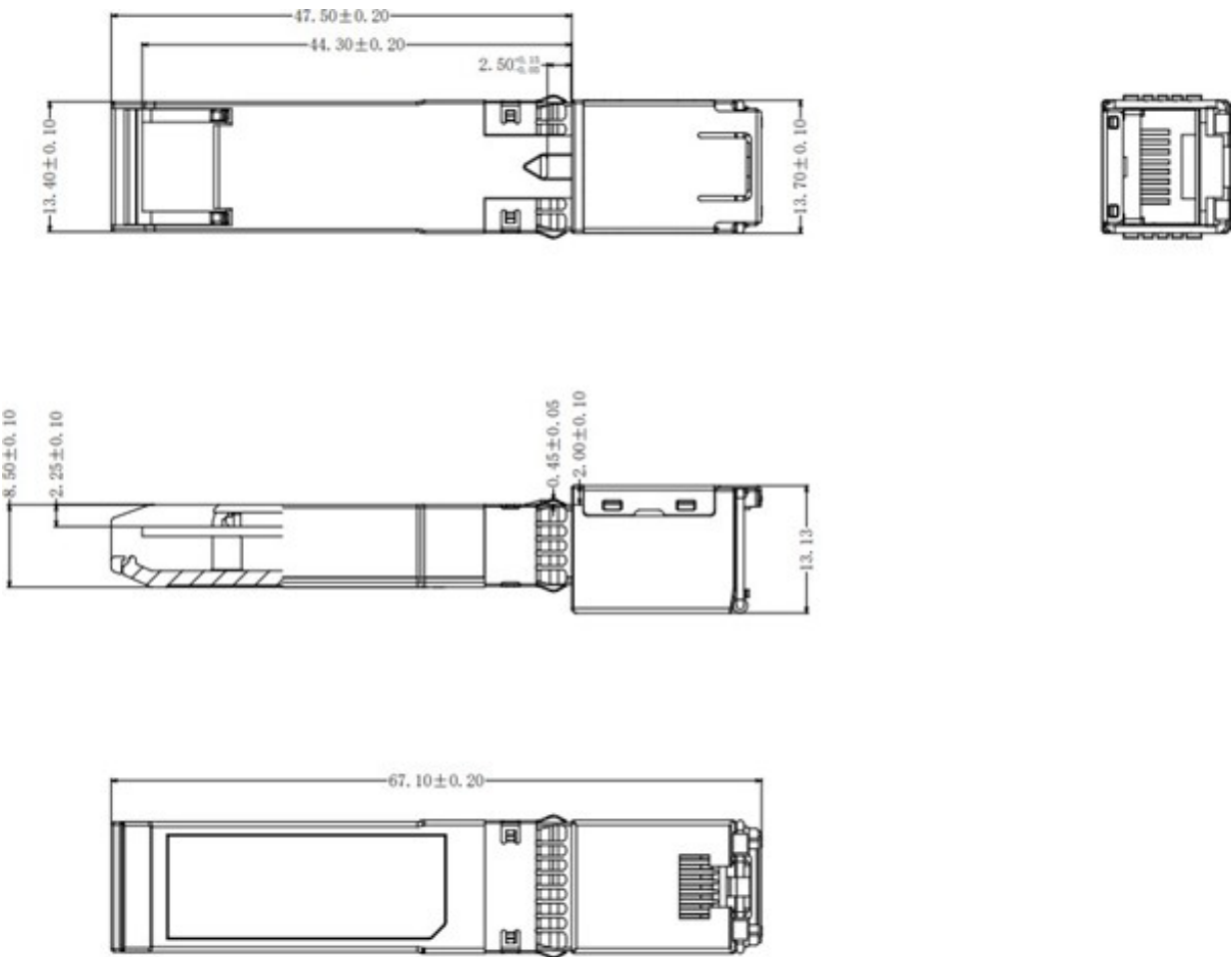
11	→	V _{EER}
12	→	RD-
13	→	RD+
14	→	V _{EER}
15	→	V _{CCR}
16	→	V _{CCT}
17	→	V _{EET}
18	→	TD+
19	→	TD-
20	→	V _{EET}

Bottom View Of Board

1	→	V _{EET}
2	→	TX_FAULT
3	→	TX_DISABLE
4	→	SDA
5	→	SCL
6	→	MOD_ABS
7	→	RS0
8	→	LOS
9	→	RS1
10	→	V _{EER}



Mechanical Specifications



About Skylane Optics

Skylane is a leading provider of transceivers for optical communication.

We offer an extensive portfolio for the enterprise, access, datacenter and metropolitan fiber optical market as well as for smart home applications and home networks.

We cover the European, South American and North American market with a strong partner network and have offices in Belgium, Brazil, Sweden and USA.

Our offerings are characterized by high quality and performance. In combination with our strong technical support, we enable our customers to build cost optimized network solutions.

We offer an extensive range of high-quality products including transceivers (Optical and copper), Active Optical Cable (AOC), Direct Attach Cable (DAC), Mux/Demux, Coding Box.

