



SPT00M301000GOI

Arista Networks® SFP-10G-T-AR Compatible 100/1000/10000Base-TX SFP+ Transceiver (Copper, 30m, RJ-45)

Product Description

This Arista Networks® SFP-10G-TL2-AR Compatible SFP+ transceiver provides 10GBase-TX throughput up to 30m over a copper connection via a RJ-45 connector. This TX module supports 10GBase auto-negotiation and can be configured to fit your needs. It is guaranteed to be 100% compatible with the equivalent Arista Networks® transceiver. This easy to install, hot swappable transceiver has been programmed, uniquely serialized and data-traffic and application tested to ensure that it will initialize and perform identically. It is built to meet or exceed the specifications of Arista Networks®, as well as to comply with MSA (Multi-Source Agreement) standards to ensure 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 and SFF-8431 MSA Compliant
- IEEE 802.3az Compliant
- RJ-45 Connector
- Commercial Temperature 0 to 70 Celsius
- Supports 10GBase-T Using an 80m Cat6a/7 Cable
- Low Power Consumption: 1.6W @10Gbps 30m, 2.0W @10Gbps 80m
- RoHS Compliant and Lead-Free
- Support Hot Pluggable



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.

Absolute Maximum Ratings

Parameter	Symbol	Min.	Typ.	Max.	Unit	Notes
Maximum Supply Voltage	Vcc	-0.5		4	V	
Storage Temperature	Tstg	-40		85	°C	1
Operating Case Temperature	Tc	0		70	°C	2
Data Rate	DR		10		Gbps	3
Bit Error Rate	BER			10 ⁻¹²		

Notes:

1. Ambient temperature.
2. Case temperature.
3. IEEE 802.3ae.

Electrical Characteristics

Parameter	Symbol	Min.	Typ.	Max.	Unit	Notes
Power Supply Voltage	Vcc	3.14	3.3	3.46	V	
Supply Current	Icc		590		mA	1
Surge Current	Isurge			30	mA	
Power Consumption @ 10Gbps 30m				1.6	W	
Power Consumption @ 10Gbps 80m				2.0	W	

Notes:

1. Test at 10Gbps rate using 80m Cat6a 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 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

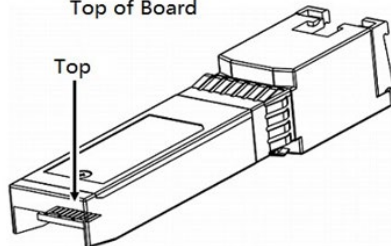
Notes:

1. Circuit ground is connected to the chassis ground.
2. Disabled: $T_{DIS} > 2V$ or open, enabled: $T_{DIS} < 0.8V$.
3. Should be pulled up with 4.7k Ω to 10k Ω on the host board to a voltage between 2V and 3.6V.

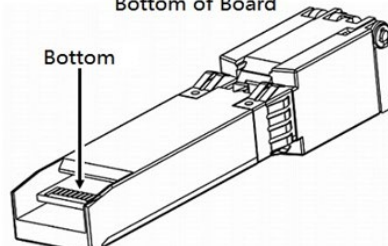
Electrical Pad Layout



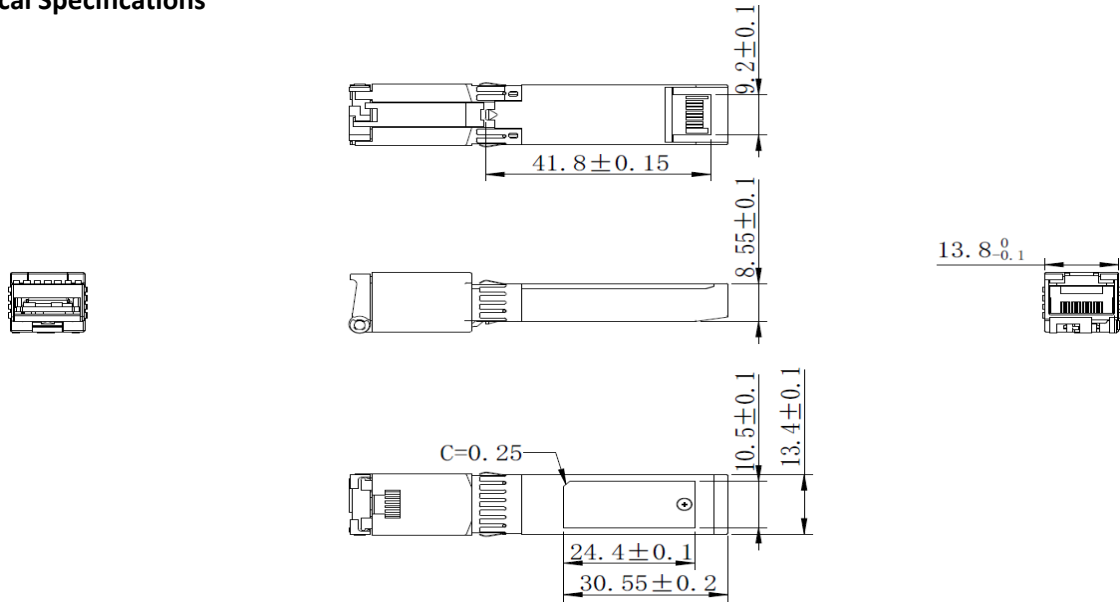
Top of Board



Bottom of Board



Mechanical Specifications



All Dimensions are $\pm 0.2\text{mm}$ Unless Otherwise Specified

Unit: mm

Weight: 25g

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.

