



# Data-Sheet

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## Electrical SFP 1G Base Optical Transceiver

JTOPTICS<sup>®</sup> 1Gb/s (JT-1G-SFP-RJ) Copper Small Form Pluggable (SFP) transceivers is high performance, cost effective module compliant with the Gigabit Ethernet and 1000BASE-T standards as specified in IEEE 802.3-2002 and IEEE 802.3ab, which supporting 1000Mbps data-rate up to 100 meters reach over unshielded twisted-pair category 5 cable. The module supports 1000 Mbps full duplex data-links with 5-level Pulse Amplitude Modulation (PAM) signals. The module provides standard serial ID information compliant with SFP MSA, which can be accessed with address of A0h via the 2wire serial CMOS EEPROM protocol. The physical IC can also be accessed via 2wire serial bus at address ACh.



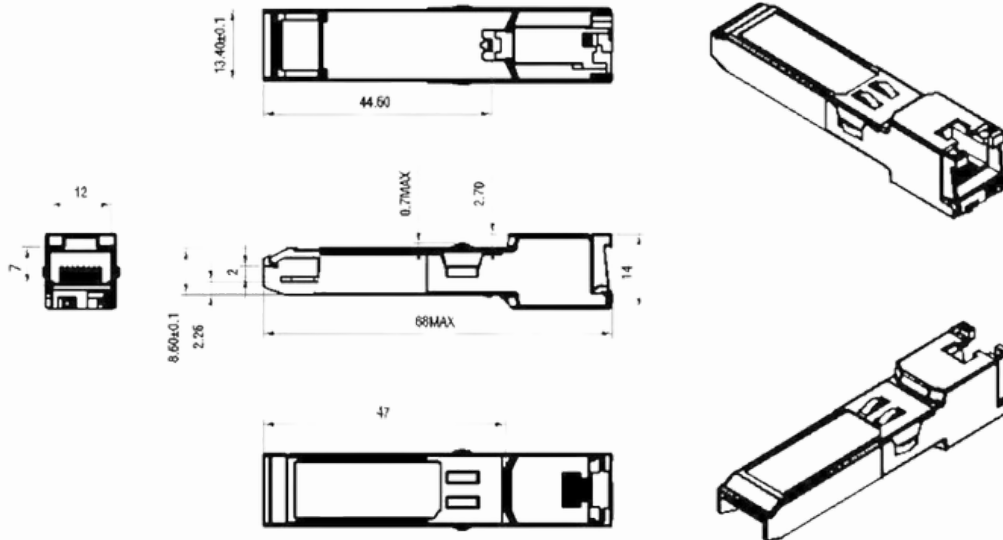
1GE SFP Electrical Transceiver  
1000BASE-T SFP Copper RJ-45 100m  
**JT-1G-SFP-RJ**

- Support 1000BASE-T Operation in Host Systems
- Support RX\_LOS as Link indication
- For 100m Reach Over UTP Cat 5/5e/6Cable
- Hot-Pluggable SFP Footprint
- Fully Metallic Enclosure for low EMI
- Low Power Dissipation (1.05W Typical)
- Compact RJ-45 Connector
- Access to Physical Layer IC via 2-Wire Serial Bus
- Compliant with IEEE Std 802.3-2002
- Compliant with MSA

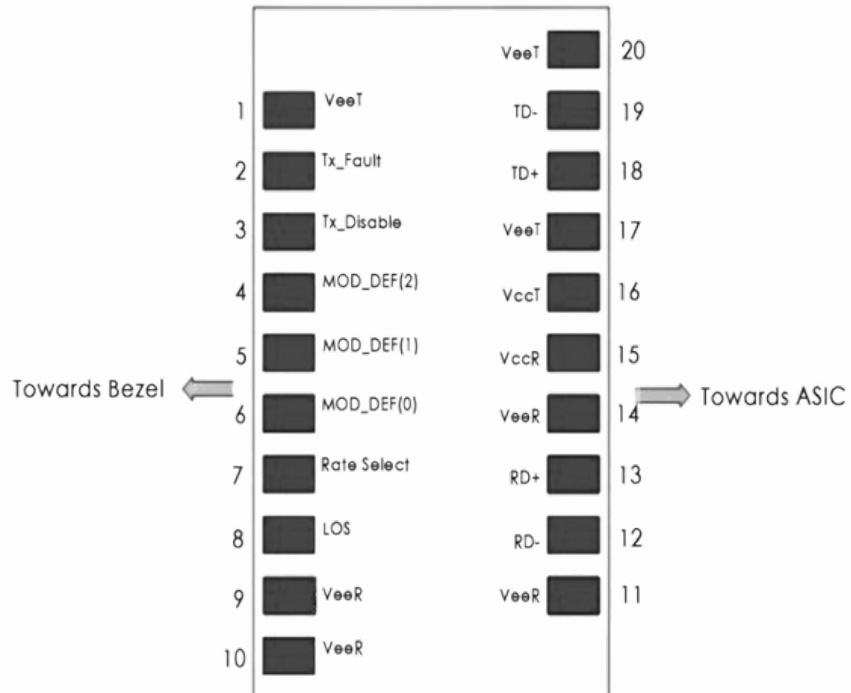
## Technical Specifications

Part No	JT-1G-SFP-RJ
Description	1GE SFP Electrical Transceiver 1000BASE-T SFP Copper RJ-45 100m Transceiver Module
Form Factor	SFP
Max Data Rate	1000Mbps
Connector	RJ-45
Power Consumption	≤1.2W
Protocols	IEEE Std 802.3 and 802.3ab, SFP MSA Compliant
DDM/DOM	NO
Media	Cat 5e/6/6a
Max Cable Distance	100m
Applications	1.25 Gigabit Ethernet over Cat 5 cable
Warranty	3 years

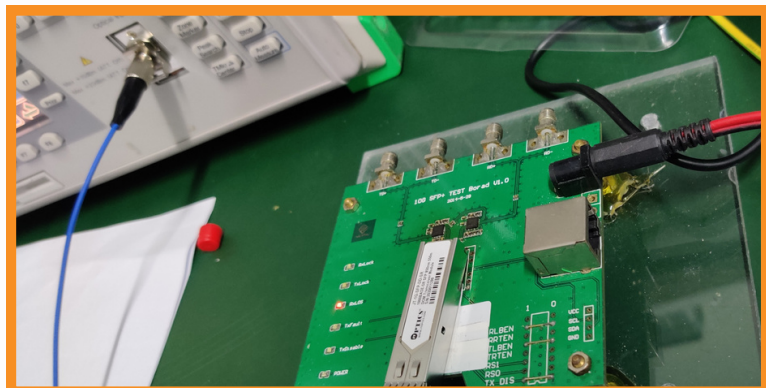
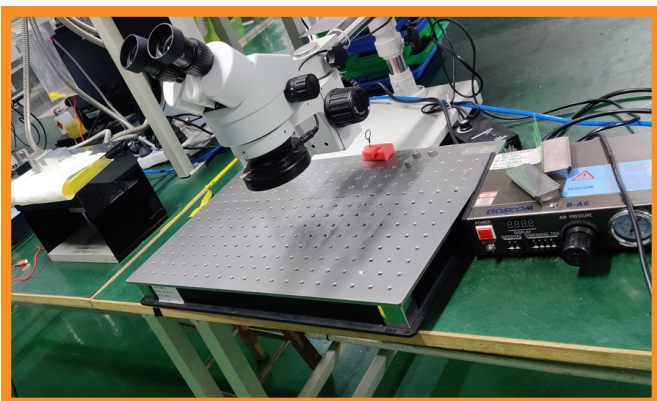
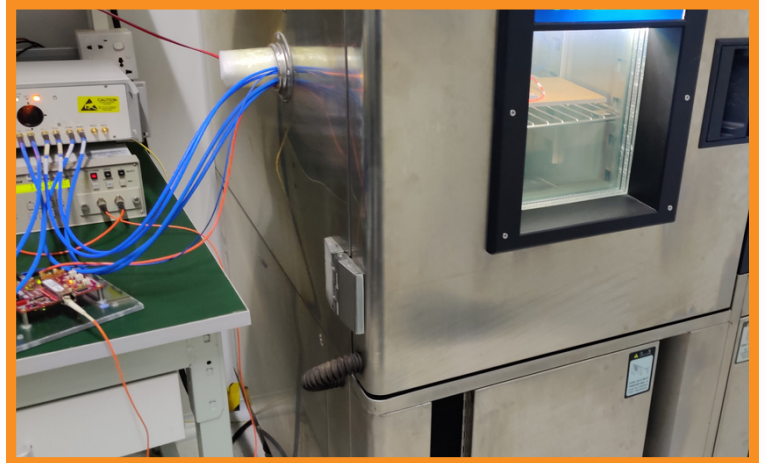
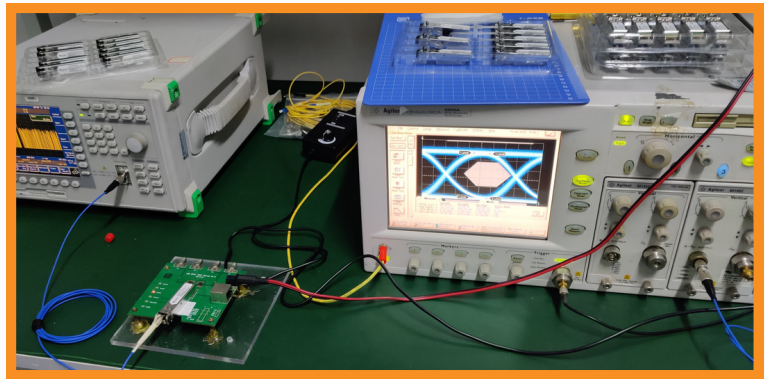
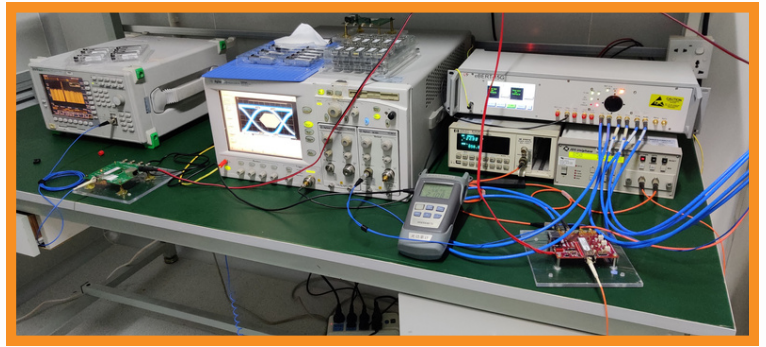
### Mechanical Dimension



### Electrical Pin Configuration



## Testing





## About JT

In the dynamic realm of technology and innovation, the emergence of **Jayani Technologies Limited** has been nothing short of a saga marked by ingenuity, resilience, and a steadfast commitment to excellence. Originating as Jayani Technologies LLP in 2011 in the vibrant city of Mumbai, India, the company has evolved into a trailblazer in its domain. This narrative unfolds against the backdrop of the company's expansion into Hong Kong, a strategic move signaling its intent to conquer new horizons.

Established in 2011, Jayani Technologies (**JTOPTICS**<sup>®</sup>) was conceived as a response to the evolving technological landscape, recognizing the need for cutting-edge solutions that marry innovation with reliability. The Mumbai headquarters became the crucible for the company's early endeavor, a melting pot of talent and vision that propelled Jayani Technologies into the forefront of its industry and emerged as a leading manufacturer and supplier of cutting-edge solutions in the fields of optical Fiber, data center, networking, and electric vehicle components.

From its inception, the company distinguished itself by its unwavering commitment to client satisfaction, a commitment that became the cornerstone of its success. Jayani Technologies quickly became synonymous with technological prowess and an unwavering dedication to delivering solutions that transcended conventional boundaries.

JTOPTICS<sup>®</sup> has developed and produced many active and passive interconnection and connectivity products suitable for different networks, aiming to become a one-stop device integration solution provider in the open optical network field, products include MPO Cables, AOC cable, passive DAC cable, optical transceivers, optical modules & subsystems, active & passive optical components, and high-density cabling products.

### **Vision**

Our vision is to be recognized by clients as trustful a trusted business partner whose mission is to help our clients by offering state-of-the-art products and services.

### **Mission**

Our mission is to catalyze the success of its clients by providing unparalleled technological solutions. The company envisions itself as a catalyst for positive change, aiming to reshape industries through innovation, integrity, and a relentless pursuit of excellence.



**Our Clients**





## Our Contact



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