



# Data-Sheet

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## SFP+ 10G Base Optical Transceiver

JTOPTICS® 10GBASE-SR 300m SFPP optical transceiver, 10G SFPP SR(JT-10G-SFPP-DD-SR) SFP+ transceiver supports up to 400m link lengths over OM4 MMF (300m over OM3 MMF) via an LC duplex connector. Digital diagnostics monitoring is available via a 2-wire serial interface, as specified in SFF-8472. Each SFP+ transceiver module is individually tested to be used on a series of Cisco switches, routers, servers, network interface card (NICs) etc.

- Full-duplex transceiver module
- Hot-pluggable SFP+ form factor
- Compliant with SFP+ MSA standard
- VCSEL transmitter and PIN receiver
- Data rate up to 11.3Gbps
- Compliant with CPRI specification
- Maximum link length of 300m
- Low power dissipation
- Operating case temperature range Commercial or Industrial
- Single 3.3V power supply
- RoHS-6 compliant (lead free)



10G SFPP Transceiver 10GBASE-SR, 850nm, LC, MMF  
**JT-10G-SFPP-DD-SR**



10G SFPP Transceiver 10GBASE-LR  
1310nm, 10km, LC, MMF  
**JT-10G-SFPP-DD-LR**

JTOPTICS® SFPP 10GBASE-LR SFP+ transceiver supports up to 10km link lengths over LC duplex SMF fiber. Digital diagnostics monitoring is available via a 2-wire serial interface, as specified in SFF-8472. Each SFP+ transceiver module is individually tested to be used on a series of Cisco switches, routers, servers, network interface card (NICs) etc. Featuring low power consumption, high speed, this 10G SFP+ transceiver is ideal for data center, enterprise wiring closet, service provider transport application, Radio & Baseband Unit, etc.

- Full-duplex transceiver module
- Hot-pluggable SFP+ form factor
- Compliant with SFP+ MSA standard
- DFB transmitter and PIN receiver
- Data rate up to 11.3Gbps
- Compliant with CPRI specification
- Wavelength with 1310nm
- Maximum link length of 10km
- Low power dissipation
- Built-in digital diagnostic interface
- Operating case temperature Commercial or Industrial
- Single 3.3V power supply
- RoHS-6 compliant (lead free)

JTOPTICS® 10Gb/s transceiver module supports up to 10km link lengths over LC duplex SMF fiber. Digital diagnostics monitoring is available via a 2-wire serial interface, as specified in SFF-8472. Each SFP+ transceiver module is individually tested to be used on a series of Cisco switches, routers, servers, network interface card (NICs) etc. Featuring low power consumption, high speed, this 10G SFP+ transceiver is ideal for data center, enterprise wiring closet, service provider transport application, Radio & Baseband Unit, etc.

- Full-duplex transceiver module
- Hot-pluggable SFP+ form factor
- Compliant with SFP+ MSA standard
- EML transmitter and APD receiver
- Data rate up to 11.3Gbps
- Compliant with CPRI specification
- Wavelength with 1310 nm
- Maximum link length of 40km
- Low power dissipation
- Available with Commercial and Industrial Temperature
- Single 3.3V power supply
- RoHS-6 compliant (lead free)



10G SFPP Transceiver 10GBASE-ER  
1310nm, 40km, LC, SMF  
**JT-10G-SFPP-DD-ER**



10G SFPP Transceiver 10GBASE-ZR  
1550nm, 80km, DOM, LC, SMF  
**JT-10G-SFPP-LC-ZR**

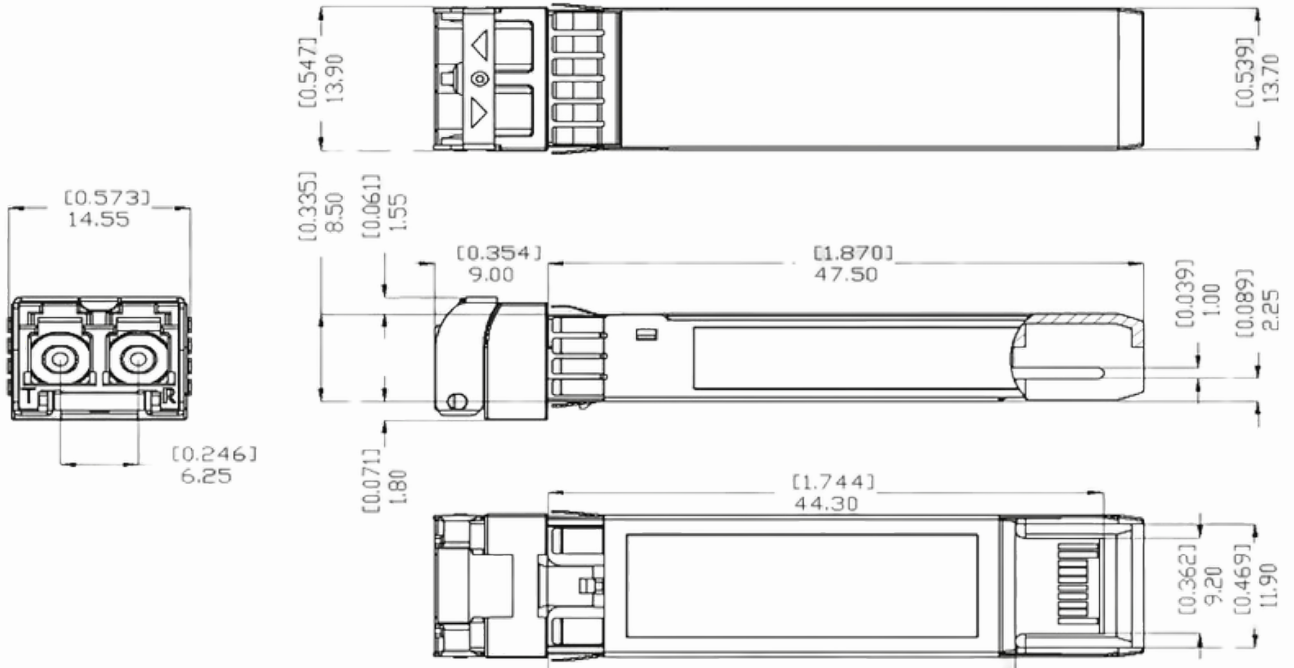
JTOPTICS® 10GBASE-ZR SFP+ transceivers are Enhanced Small Form Factor Pluggable SFP+ transceivers designed for use in 10-Gigabit multi-rate links up to 100km of G.652 single mode fiber. They support 10G Ethernet ZR and 10G Fibre Channel. Digital diagnostics functions are available via a 2-wire serial interface. The optical transceiver is compliant per the RoHS Directive 2011/65/EU.

- Full-duplex transceiver module
- Hot-pluggable SFP+ form factor
- Compliant with SFP+ MSA standard
- EML transmitter and APD receiver
- Data rate up to 11.3Gbps
- Compliant with CPRI specification
- Wavelength with 1550 nm
- Maximum link length of 80km
- Low power dissipation
- Available with Commercial and Industrial Temperature
- Single 3.3V power supply
- RoHS-6 compliant (lead free)

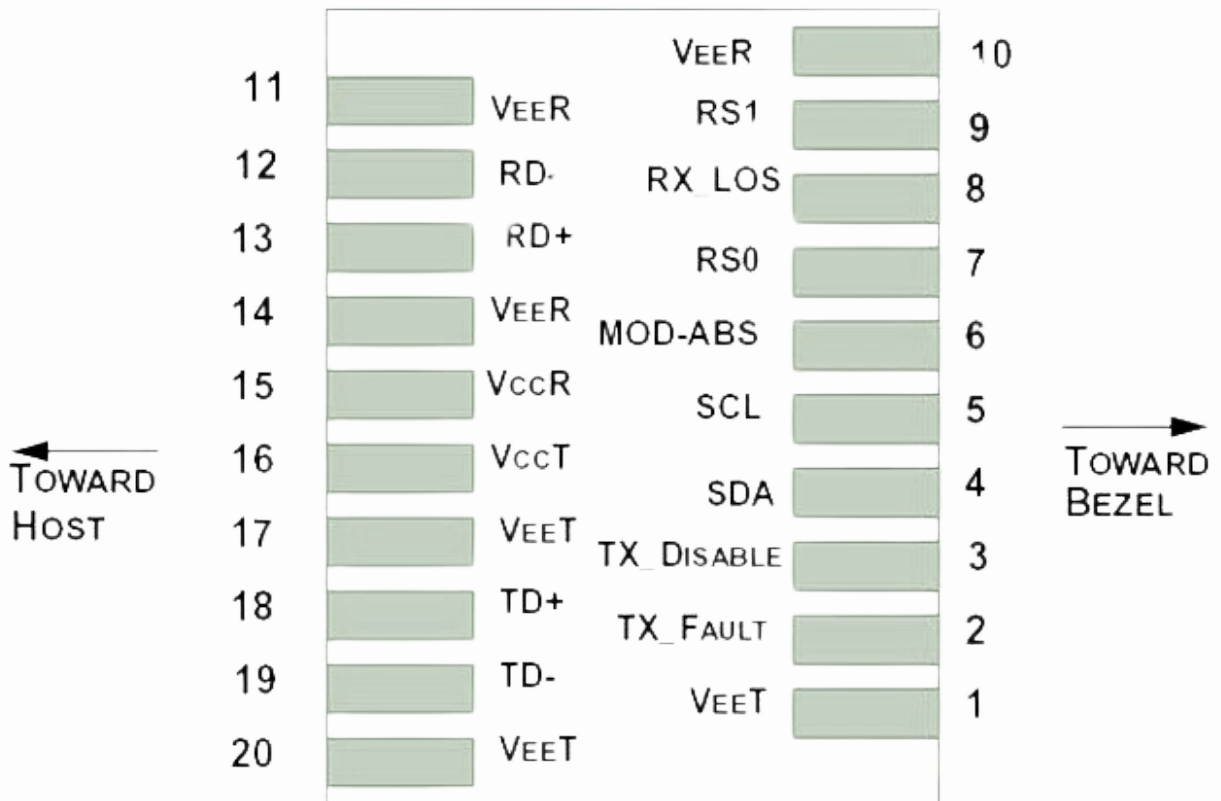
## Technical Specifications

Part No	JT-10G-SFPP-DD-SR	JT-10G-SFPP-DD-LR	JT-10G-SFPP-DD-ER	JT-10G-SFPP-DD-ZR
<b>Description</b>	10GBASE-SR SFP+ 850nm 300m	10GBASE-LR SFP+ 1310nm 20km	10GBASE-ER SFP+ 1310nm 40km	10GBASE-ZR SFP+ 80km
<b>Form Factor</b>	SFP+	SFP+	SFP+	SFP+
<b>Max Data Rate</b>	10.3125Gbps	10.3125Gbps	11.3Gbps	11.3Gbps
<b>Connector</b>	Duplex LC	Duplex LC	Duplex LC	Duplex LC
<b>Wavelength</b>	850nm	1310nm	1310nm	1550nm
<b>Transceiver Type</b>	VCSEL	DFB	DFB	EML
<b>Receiver Type</b>	PIN	PIN	PIN	APD
<b>Tx Power (Average)</b>	-7 ~ -1	-5 ~ +1	1 ~ +5	0 ~ +5
<b>Receiver Sensitivity (Average)</b>	≤-11	≤-14.4	≤-15	≤-23
<b>Operating Temperature</b>	0 to 70°C (32 to 158°F)	0 to 70°C (32 to 158°F)	0 to 70°C (32 to 158°F)	0 to 70°C (32 to 158°F)
<b>Protocols</b>	IEEE 802.3ae, SFF-8472, SFF-8431, SFF-8432,SFP+ MSA Compliant, CPRI, eCPRI	IEEE 802.3ae, SFF-8472, SFF-8431, SFF-8432,SFP+ MSA Compliant, CPRI, eCPRI	SFP+ MSA Compliant, CPRI, eCPRI	SFP+ MSA Compliant, CPRI, eCPRI
<b>DDM/DOM</b>	Supported	Supported	Supported	Supported
<b>Media</b>	MMF	SMF	SMF	SMF
<b>Max Cable Distance</b>	300m@OM3	20km	40km	80km
<b>Applications</b>	10G Ethernet OTN OTU2e 10G Fibre Channel 10G SONET/SDH 10G CPRI	10G Ethernet OTN OTU2e 10G Fibre Channel 10G SONET/SDH 10G CPRI	10G Ethernet OTN OTU2e 10G Fibre Channel 10G SONET/SDH 10G CPRI	10G Ethernet OTN OTU2e 10G Fibre Channel 10G SONET/SDH 10G CPRI
<b>Warranty</b>	3 Years	3 Years	3 Years	3 Years

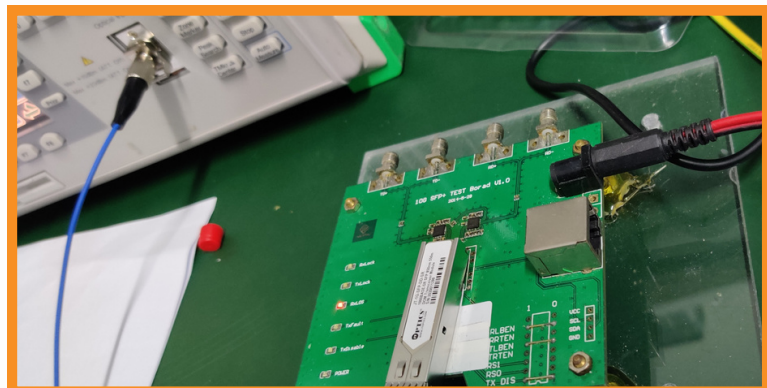
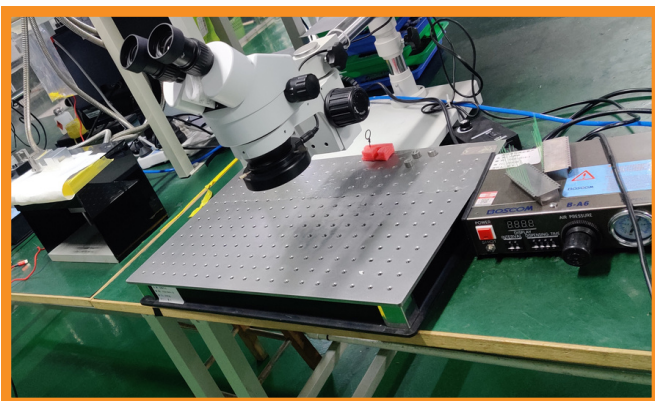
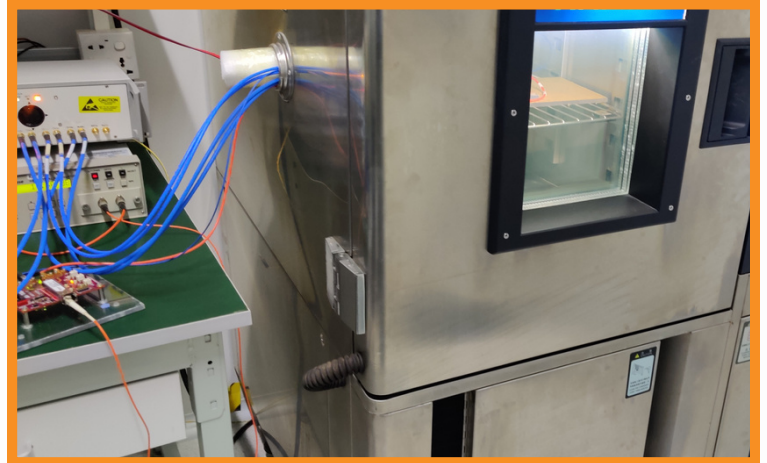
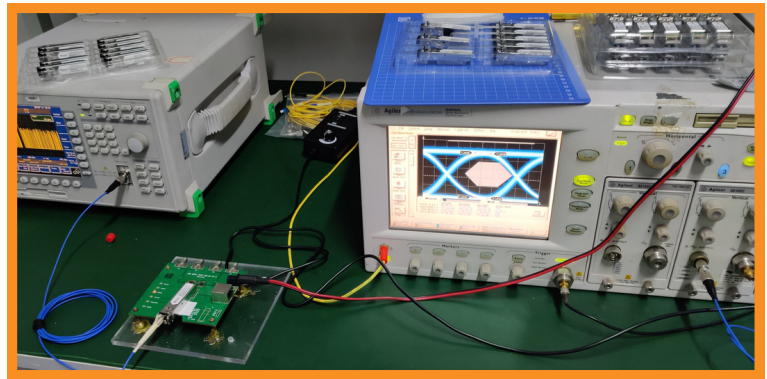
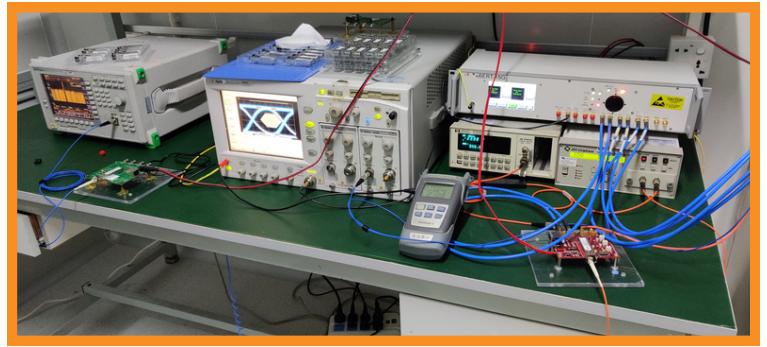
**Mechanical Dimension**



**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



**ciena**

**ADVA**<sup>™</sup>  
Optical Networking

**colt**

**CISCO**

**Coriant**

**MAVENIR**



**इसरो isro**

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NETWORKS

**TEJAS**<sup>®</sup>  
NETWORKS

**भारत इलेक्ट्रॉनिक्स**  
**BHARAT ELECTRONICS**

**HITACHI**

**एनटीपीसी**  
**NTPC**

**TATA**

**LARSEN & TOUBRO**





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**Qatar**

**JAYANI TECHNOLOGIES LLP**