

# 10G Gigabit SFP+ Transceiver Modules

## Reliable, high-performance SFP+ transceiver modules for 10G Gigabit Ethernet applications



EnGenius 10G Small Form-Factor Pluggable Plus (SFP+) transceiver is an industry standard hot-swappable device that plugs into the SFP port or slot and links the port with the network. It is small form factor pluggable module with standard LC duplex connector for fiber communications. It designed to compliant to SFI electrical specification.

### Features

- > Hot pluggable LC Duplex connector
- > IEEE 802.3z compliant
- > Industry standard compliance
- > Low power dissipation
- > Class 1 laser product, complies with International Safety Standard IEC 825
- > ROHS Compliant

## 10G SFP+ Series

	<b>SFP3185-03</b>	<b>SFP3213-10</b>
Connector Type	LC	LC
Data Rate	10Gbps	10Gbps
Wavelength	850nm	1310nm
Fiber Type	MMF	SMF
Max Transmission Distance	0.3km	10km
<b>Transmitter Characteristics</b>		
Supply Voltage	3.13 ~ 3.46V	3.13 ~ 3.46V
Supply Current	300mA	300mA
Output Optical Power	-6.5 ~ -1dBm	-8.2 ~ 0.5dBm
<b>Receiver Characteristics</b>		
Supply Voltage	3.13 ~ 3.46V	3.13 ~ 3.46V
Supply Current	300mA	300mA
Maximum Receiver Power	-3dBm	1.5dBm
Optical Receiver Sensitivity	-11.1dBm	-12.6dBm
<b>Physical Specifications</b>		
Dimensions (WxDxH)	13.9 x 58.4 x 12.6mm	
Weight	25g	
<b>Environmental Limits</b>		
Operating Temperature	0°C to 70°C (32°F to 158°F)	
Storage Temperature	-40°C to 85°C (-40°F to 185°F)	

## 10G SFP+ Bi-Di Series

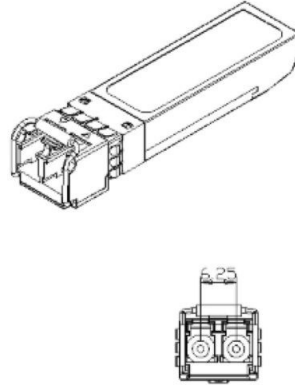
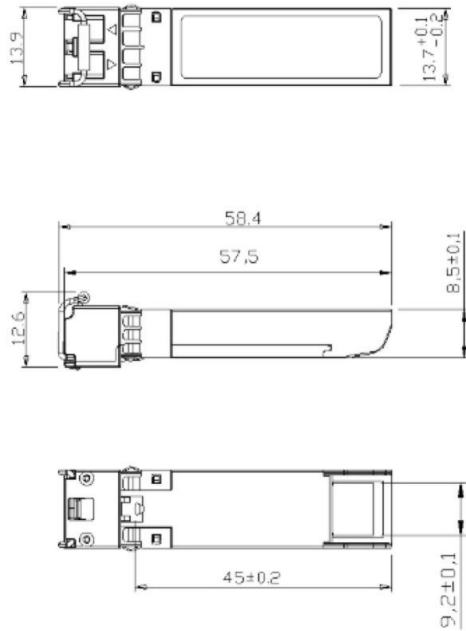
	<b>SFP3312-20</b>	<b>SFP3313-20</b>
Connector Type	LC	LC
Data Rate	10Gbps	10Gbps
Wavelength	Tx: 1270nm Rx:1330nm	Tx: 1330nm Rx:1270nm
Fiber Type	SMF	SMF
Max Transmission Distance	20km	20km
<b>Transmitter Characteristics</b>		
Supply Voltage	3.0 ~ 3.6V	3.0 ~ 3.6V
Supply Current	300mA	300mA
Output Optical Power	-2 ~ -2dBm	-2 ~ 2dBm
<b>Receiver Characteristics</b>		
Supply Voltage	3.15 ~ 3.45V	3.15 ~ 3.45V
Supply Current	300mA	300mA
Maximum Receiver Power	-14.5dBm	-14.1dBm
Optical Receiver Sensitivity	-18dBm	-20dBm
<b>Physical Specifications</b>		
Dimensions (WxDxH)	14 x 57.5 x 10.8 mm	
Weight	25g	
<b>Environmental Limits</b>		
Operating Temperature	0°C to 70°C (32°F to 158°F)	
Storage Temperature	-40°C to 85°C (-40°F to 185°F)	

## 10G SFP+ Fiber to Cooper

	<b>SFP3500</b>
Connector Type	RJ-45
Data Rate	10Gbps
Max Transmission Distance	30m
Supply Maximum Current	900mA
Input Voltage	3.13 ~ 3.47V
Supply Current	300mA
Dimensions (WxDxH)	13 x 68 x 13.7 mm
Weight	24.5g
<b>Environmental Limits</b>	
Operating Temperature	0°C to 65°C (32°F to 149°F)
Storage Temperature	-40°C to 85°C (-40°F to 185°F)

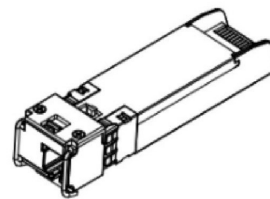
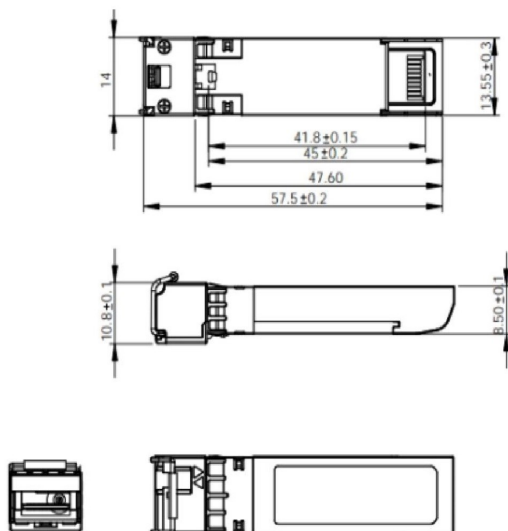
Dimensions

10G SFP+ Series



Unit: mm

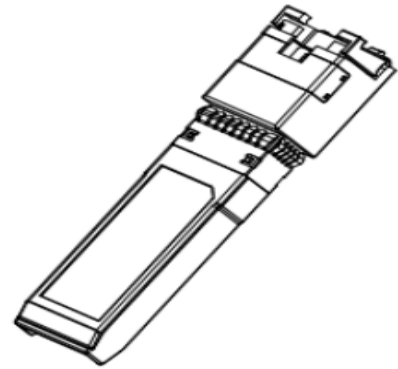
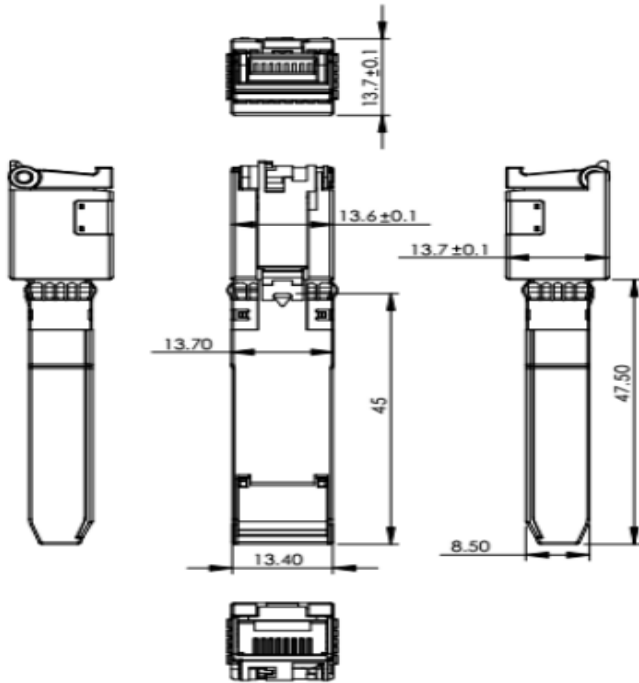
10G SFP+ Bi-Di Series



Unit: mm

Dimensions

10G SFP+ Fiber to Cooper Series



Unit: mm

## Ordering Information

Product No.	Product Description
<b>10G SFP+ Transceiver</b>	
SFP3185-03	10G BASE-SX SFP+ Transceiver, 850nm; 0.3km
SFP3185-03A	10G BASE-SX SFP+ Transceiver, 850nm; 0.3km (Made in China)
SFP3213-10	10G BASE-LX SFP+ Transceiver, 1310nm; 10km
SFP3213-10A	10G BASE-LX SFP+ Transceiver, 1310nm; 10km (Made in China)
SFP3312-20	10G BASE-LX SFP+ Bi-Di Transceiver, Tx:1270nm / Rx:1330nm; 20km
SFP3312-20A	10G BASE-LX SFP+ Bi-Di Transceiver, Tx:1270nm / Rx:1330nm; 20km (Made in China)
SFP3313-20	10G BASE-LX SFP+ Bi-Di Transceiver, Tx:1330nm / Rx:1270nm; 20km
SFP3313-20A	10G BASE-LX SFP+ Bi-Di Transceiver, Tx:1330nm / Rx:1270nm; 20km (Made in China)
SFP3500	10G BASE, Fiber to cooper, 30M
<b>10G DAC Cable</b>	
DAC1130-01	10G Direct Attach Copper Cable, passive , 1 meter
DAC1130-03	10G Direct Attach Copper Cable, passive , 3 meter
DAC1130-05	10G Direct Attach Copper Cable, passive , 5 meter
<b>1G SFP Transceiver</b>	
SFP2185-05	1000BASE-SX SFP Transceiver, 850nm; 0.5km
SFP2185-05A	1000BASE-SX SFP Transceiver, 850nm; 0.5km (Made in China)
SFP2213-10	1000BASE-LX SFP Transceiver, 1310nm; 10km
SFP2213-10A	1000BASE-LX SFP Transceiver, 1310nm; 10km (Made in China)
SFP2313-20	1000BASE-LX SFP Bi-Di Transceiver, Tx:1310nm / Rx:1550nm; 20km
SFP2313-20A	1000BASE-LX SFP Bi-Di Transceiver, Tx:1310nm / Rx:1550nm; 20km (Made in China)
SFP2314-20A	1000BASE-LX SFP Bi-Di Transceiver, Tx:1490nm / Rx:1310nm; 20km (Made in China)
SFP2315-20	1000BASE-LX SFP Bi-Di Transceiver, Tx:1550nm / Rx:1310nm; 20km
SFP2500	1000BASE, Fiber to Cooper

HQ , Taiwan  
[www.engeniusnetworks.com](http://www.engeniusnetworks.com)  
 Costa Mesa, California, USA | (+1) 714 432 8668  
[www.engeniustech.com](http://www.engeniustech.com)

Singapore | (+65) 6227 1088  
[www.engeniustech.com.sg](http://www.engeniustech.com.sg)  
 Eindhoven, Netherlands | (+31) 40 8200 888  
[www.engeniusnetworks.eu](http://www.engeniusnetworks.eu)  
 Dubai, UAE | (+971) 4 357 5599  
[www.engenius-me.com](http://www.engenius-me.com)



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## Ordering Information

Product No.	Product Description
<b><i>FIT Managed Switch</i></b>	
EWS2910P-FIT	Engenius Fit 8-Port 55W Gigabit PoE+ Switch
EWS2910FP-FIT	Engenius Fit 8-Port 110W Gigabit PoE+ Switch
EWS7928P-FIT	Engenius Fit 24-Port 240W Gigabit PoE+ Switch
EWS7928FP-FIT	Engenius Fit 24-Port 410W Gigabit PoE+ Switch
EWS7952P-FIT	Engenius Fit 48-Port 410W Gigabit PoE+ Switch
EWS7952FP-FIT	Engenius Fit 48-Port 740W Gigabit PoE+ Switch
<b><i>Cloud Management Switch</i></b>	
ECS1008P	Cloud Managed Gigabit 8-Port Gigabit 55W PoE+ Switch
ECS1112FP	Cloud Managed Gigabit 8-Port Gigabit 130W PoE+ Switch
ECS1528T	Cloud Managed Gigabit 24-Port Gigabit Switch with 4 SFP+ Ports
ECS1528P	Cloud Managed Gigabit 24-Port Gigabit 240W PoE+ Switch with 4 SFP+ Ports
ECS1528FP	Cloud Managed Gigabit 48-Port Gigabit 410W PoE+ Switch with 4 SFP+ Ports
ECS1552	Cloud Managed Gigabit 48-Port Gigabit Switch with 4 SFP+ Ports
ECS1552P	Cloud Managed Gigabit 48-Port Gigabit 410W PoE+ Switch with 4 SFP+ Ports
ECS1552FP	Cloud Managed Gigabit 48-Port Gigabit 740W PoE+ Switch with 4 SFP+ Ports
ECS2512	Cloud Managed 8-Port Multi-Gigabit 2.5G Switch with 4 SFP+ Ports
ECS2510FP	Cloud Managed 8-Port Multi-Gigabit 2.5G 240W PoE+ Switch with 2 SFP+ Ports
ECS2512FP	Cloud Managed 8-Port Multi-Gigabit 2.5G 240W PoE++ Switch with 4 SFP+ Ports
ECS2528FP	Cloud Managed 24-Port Multi-Gigabit 2.5G 410W PoE+ Switch with 4 SFP+ Ports
ECS2552FP	Cloud Managed 48-Port Multi-Gigabit 2.5G 740W PoE+ Switch with 4 SFP+ Ports
ECS5512	Cloud Managed 8-Port 10 - Gigabit Switch with 4 SFP+ Ports
ECS5512FP	Cloud Managed 8-Port 10 - Gigabit 420W PoE++ Switch with 4 SFP+ Ports
ECS5512F	Cloud Managed Switch with 12 SFP+ Ports

### HQ , Taiwan

[www.engeniusnetworks.com](http://www.engeniusnetworks.com)

Costa Mesa, California, USA | (+1) 714 432 8668

[www.engeniustech.com](http://www.engeniustech.com)

Singapore | (+65) 6227 1088

[www.engeniustech.com.sg](http://www.engeniustech.com.sg)

Eindhoven, Netherlands | (+31) 40 8200 888

[www.engeniusnetworks.eu](http://www.engeniusnetworks.eu)

Dubai, UAE | (+971) 4 357 5599

[www.engenius-me.com](http://www.engenius-me.com)



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Version 1.2— 03/20/2024