

RG 25GBASE Series Optical Modules





Product Pictures



Appearance of VG-SFP-AOCXM



Appearance of 25G Module

Product Overview

As an industry-leading ICT infrastructure and industry solution provider, Ruijie offers customers a wide variety of high-density and low-power 25G optical modules. They are applicable to data centers, high-performance computing (HPC) networks, and enterprise core and aggregation layers, enabling cost-effective and efficient high-speed interconnection between data center servers and switches.

VG-SFP-SR-MM850 Module

The VG-SFP-SR-MM850 is aligned to IEEE 25GBASE-SR optical specifications and supports a link length of up to 100 meters over a single-mode fiber (SMF) with an LC connector. It adopts the SFP28 form factor and operates at a wavelength of 850 nm. The transceiver conforms to SFF-8432, SFP+ MSA, IEEE802.3by and RoHS standards.

VG-SFP-LR-SM1310 Module

The VG-SFP-LR-SM1310 is aligned to IEEE 25GBASE-LR optical specifications and supports a link length of up to 10 kilometers over an SMF with an LC connector. It adopts the SFP28 form factor and operates at a wavelength of 1310 nm. The transceiver conforms to SFF-8432, SFF-8431, SFP+MSA, IEEE 802.3cc, and RoHS standards.

VG-SFP-AOCXM Cable

SFP28 25G to SFP28 40G active optical cables (AOCs) are suitable for short-distance transmission and offer a flexible way to connect within and across racks. AOCs are much thinner and lighter than copper cables, which makes cable management easier. AOCs enable efficient system airflow, which is crucial in high-density racks. There is one model available: VG-SFP-AOC5M, an AOC cable in a length of 5 meters.



Product Features

- Hot swapping, allowing for simplified maintenance
- High reliability and low power consumption, allowing for prolonged service life
- Compliance with RoHS, REACH, and FDA standards

Product Specifications

Optical Module Specifications

Model	VG-SFP-SR-MM850	VG-SFP-LR-SM1310
Data rate	25.78 Gbps	
Form factor	SFP28	
Connector type	Duplex LC	
Cable type	MMF	SMF
Fiber end face finish type	Ultra Physical Contact (UPC)	Ultra Physical Contact (UPC)
Transmitter type	VCSEL	DFB
Receiver type	PIN	
Reach	OM3: 70 m (229.66 ft.) OM4: 100 m (328.08 ft.)	10 km (32,808.40 ft.)
Bit error ratio (BER)	5.00E-15	
Data diagnosis-capable (DDM/DOM)	Yes	
Power consumption	≤ 1.5 W	

Transmitter Optical Parameters

Model	VG-SFP-SR-MM850	VG-SFP-LR-SM1310
Wavelength (nm)	(840, 860)	(1295, 1325)
Max. transmit power (AVG)	2.4 dBm	2 dBm



Model	VG-SFP-SR-MM850	VG-SFP-LR-SM1310
Min. transmit power (AVG)	-8.4 dBm	-7 dBm
Min. extinction ratio	2 dB	3 dB

Receiver Optical Parameters

Model	VG-SFP-SR-MM850	VG-SFP-LR-SM1310
Receive sensitivity (OMA)	< -10.3 dBm	< -13.3 dBm
Overload optical power (AVG)	2.4 dBm	2 dBm

Environment and Reliability

Model	VG-SFP-SR-MM850	VG-SFP-LR-SM1310
Operating temperature	0°C to 70°C (32°F to 158°F)	
Operating humidity	10% RH to 90% RH	
Storage temperature	-40°C to +85°C (-40°F to +185°F)	
Storage humidity	10% RH to 90% RH	

Dimensions and Weight

Model	VG-SFP-SR-MM850	VG-SFP-LR-SM1310
Dimensions (W x D x H)	56.5 mm x 13.5 mm x 8.5 mm (2.22 in. x 0.51 in	n. x 0.33 in.)
Weight	50 g (0.11 lbs.)	

Cable Specifications

Model	VG-SFP-AOC5M	VG-SFP-AOC7M
Data rate	25.78 Gbps	
Form factor	SFP28	
Connector type	SFP28 to SFP28	



Model	VG-SFP-AOC5M	VG-SFP-AOC7M
Data diagnosis-capable (DDM/DOM)	Yes	
Length	5 m (16.40 ft.)	7 m (22.97 ft.)
Module type	Active	

Order Information

Model	Description
VG-SFP-SR-MM850	25G SR module, SFP28 form factor, LC, 850 nm, 100 m (328.08 ft.) over MMF
VG-SFP-LR-SM1310	25G LR module, SFP28 form factor, LC, 1310 nm, 10 km (32,808.40 ft.) over SMF
VG-SFP-AOC5M	25G SFP28 AOC cable, 5 m (16.40 ft.)
VG-SFP-AOC7M	25G SFP28 AOC cable, 7 m (22.97 ft.)





Ruijie Networks Co., Ltd.

For further information, please visit our website https://www.ruijienetworks.com

All rights are reserved by Ruijie Networks Co., Ltd. Ruijie reserves the right to change, modify, transfer, or otherwise revise this publication without notice, and the most current version of the publication shall be applicable.