SM100GSA-20

Cudy SM100GSA-20 Single Mode 1.25Gb/s SFP Module

Product Overview

Cudy SM100GSA-20 Single Mode 1.25Gb/s SFP module, SFP package with LC connector, 1310nm fp Laser and pin Photo detector, Up to 20km transmission on SMF



Specifications

Overview Summary:

The Cudy SM100GSA-20 Single Mode 1.25Gb/s SFP Module offers dependable high-speed network connectivity for businesses and telecom operations across South Africa. Designed with an LC connector and 1310nm FP laser, it delivers stable transmissions up to 20km over single-mode fiber. Compact and hot-pluggable, this module simplifies installation and replacement, ensuring minimal disruption to your network. Shop now to upgrade your network backbone with reliable performance and easy maintenance.

Equipped with a PIN photodetector and Digital Diagnostic Monitoring (DDM), the module allows real-time monitoring of temperature, voltage, and optical power. Its compliance with SFP MSA and safety standards ensures seamless integration and safe operation. Buy now to maintain consistent, long-distance network performance with this efficient and robust module.

Performance tier: Enterprise-grade

Uses: Long-distance fiber connections, Data centers, Telecom networks, Backbone networking, Point-to-point links

Overview:

Cudy SM100GSA-20 Single Mode 1.25Gb/s SFP Module
The Cudy SM100GSA-20 Single Mode 1.25Gb/s SFP Module provides dependable high-speed networking for enterprise, telecom, and data center applications. With an LC connector and 1310nm FP laser, it supports up to 20km transmission over single-mode fiber. Fully compliant with SFP Multi-Source Agreement (MSA), this module integrates seamlessly with a wide range of networking devices. It is ideal for backbone links, long-distance data transfer, and secure point-to-point connections.

Description
This SFP module delivers stable, high-performance connectivity with a PIN photodetector for excellent receive sensitivity and

low-jitter optical output. The LVPECL-compatible data interface and 3.3V power supply ensure efficient operation. Equipped with Digital Diagnostic Monitoring (DDM) for real-time monitoring of temperature, voltage, and optical power, it simplifies maintenance and troubleshooting. Compact and hot-pluggable, the module allows quick installation and replacement with no network downtime. RoHS-compliant and IEC-60825 laser safe, it meets environmental and safety standards while ensuring reliable performance over a wide temperature range.

Features:

Key Specifications

- Transmission speed: 1.25Gb/s
- Connector type: LC
- Laser type: 1310nm FP
- Detector type: PIN photodetector
- Maximum transmission distance: 20km on single-mode fiber
- Power supply: +3.3V
- Data interface: LVPECL compatible
- Compliance: SFP MSA, IEEE 802.3z, ANSI Fibre Channel, IEC-60825, RoHS, SFF-8472

Durable and Efficient Design

The SM100GSA-20 is designed for long-term reliability with low EMI, strong ESD protection, and signal ground isolation. It operates in temperatures from 0degrees C to 60degrees C, making it suitable for both controlled data centers and remote networking sites. Its compact, hot-pluggable design allows easy deployment and ensures consistent network performance.

Monitoring and Maintenance Made Easy

Digital Diagnostic Monitoring (DDM) provides real-time insights into the module's operating conditions. Network administrators can track temperature, voltage, and optical power to optimize performance and quickly address potential issues.

Package Contents

- Cudy SM100GSA-20 Single Mode 1.25Gb/s SFP Module x1

Why Choose the Cudy SM100GSA-20

Offering long-distance connectivity, stable performance, and simple installation, this SFP module is ideal for network upgrades and expansions. Its combination of efficiency, reliability, and diagnostic capabilities ensures high-performance fiber networks are maintained with minimal downtime.

Specifications:

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Specifications	
Product Code	SM100GSA-20
Transmitter Section	
Center Wavelength	1260nm (Min)/ 1310nm (Typical) 1360 nm (Max)
Spectral Width(RMS)	4 nm (Max)
Average Output Power Po	-9 (Min)/ -3 dBm (Max)
Extinction Ratio	8dB (Min)
Rise/FallTime(20%~80%)	300 ps (Max)

Total Jitter	0.43 UI (Max)
Optical Eye Diagram	IEEE 802.3z and ANSI Fibre Channel Compatible
Input Differential Impendence	90 Ohm(Min)/ 100 Ohm (Typical)/ 110 Ohm (Max)
Data Input Swing Differential	500mV (Min)/ 2400mV (Max)
TX Disable	Disable - 2.0V (Min)/ Vcc (Max), Enable - 0V (Min)/ 0.8V (Max)
TX Fault	Assert - 2.0V (Min)/ Vcc (Max), Deassert - 0V (Min)/ 0.8V (Max)
Receiver Section	
Center Wavelength	1260 nm (Min)/ 1620 nm (Max)
Receiver Sensitivity	-22 dBm (Max)
Receiver Overload	-3 dBm (Min)
Return Loss	12 dB (Min)
LOS Assert	-36 dBm (Min)
LOS Dessert	-23 dBm (Max)
LOS Hysteresis 0.5 5 (Min)	
Output Differential Impendence	100 Ohm (Typical)
Data Input Swing Differential	370mV (Min)/ 2000mV (Max)
Rx_LOS	Assert - 2.0V (Min)/ Vcc (Max), Deassert - 0V (Min)/ 0.8V (Max)
Storage Temperature (Min/Max)	-40/85degreesC
Supply Voltage (Min/Max)	0/ +3.6V
Operating Relative Humidity (Min/Max)	5/ 95%
Product Dimensions	5.5 x 13.5 x 0.9 cm

Product Information Online

For the latest product information, availability and purchasing details, please visit the product page:

Product page:
https://www.comx-computers.co.za/SM100GSA-20-Cudy-SM100GSA-20-Single-Mode-1-25Gb-s-SFP-Module-p-326822.php

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