HS-31DLC20D

HS-31DLC20D is a reliable, **industrial-grade 1G/2.5G SFP module** designed for long-distance single-mode links **up to 20 km**. It uses the widely supported 1310 nm wavelength and an LC connector for full-duplex operation, making it a perfect fit for **backbone links, campus networks, industrial deployments, and ISP infrastructure**.



This new model delivers all the essential features of our popular S-31DLC20D, but now with **2.5G** support at the same affordable price. A straightforward upgrade path for customers who want additional bandwidth while preserving existing fiber installations.

The module includes built-in digital diagnostics (DDM) for monitoring optical power, voltage, temperature, laser bias current, and other key parameters. These functions help detect abnormal activity or when customizable operating limits are exceeded. Monitoring makes it easier to plan ahead, make informed decisions, and schedule upgrades or maintenance based on real performance data.

Specifications

Product code	HS-31DLC20D
Format	SFP
Connector	Duplex LC connector
Mode	Single mode
Data Rate	1G/2.5G
Wavelength	1310 nm
Distance	Up to 20 km

Electrical characteristics	Min.	Max.	Unit	Note
Receiver				
Receiver differential output voltage	300	600	mVpp	1
LOS output Voltage-High	Vcc- 0.5	Vcc	V	2
LOS output Voltage-Low	Vee	Vee+0.5	V	2

1. Into 100Ω differential termination.
2. LOS is an open collector output. Should be pulled up with 4.7kΩ – 10kΩ on the host board. Normal operation is logic 0; loss of signal is logic 1.

Optical characteristics	Min.	Max.	Unit	Note
Transmitter				
Output power	-5	0	dBm	1
Receiver				
Receiver sensitivity (OMA)		-20	dBm	2
LOS-Deasserted (Avg.)		-21	dBm	
LOS-Asserted (Avg.)	-35		dBm	
LOS-Hysteresis	0.5	5	dB	

1. The optical power is launched into 9/125μm SMF.
2. Measured with a PRBS 27-1 test pattern @2.5Gbps, worst-case extinction ratio, BER ≤1×10-10