

DM20-L

DATALINK MODULE

Long Range Wireless Data Communication



LONG WORKING RANGE

Adopted LoRa (Long Range) protocol and realizing receiving and transmitting in one single module, the DM20-L datalink module can reach more than 10km working range while keeps the transmitting power at 2W and the receiving power at 0.2W. The ultra-long working range brings more possibilities for wider applications.

STRONG PERFORMANCE

With advantages of stable output power, high receiving sensitivity, low error rate and strong anti-interference ability, the DM20-L shows strong performance for real-time data transmission. The advanced CSS digital modulation technology and demodulation technology, making it suitable for RTK application.

EASE OF INTEGRATION

Featured surface-mounted design, 33×26.5×3.5mm small size and low power, the DM20-L datalink module is specially designed for system developers to do various integrations. With good electromagnetic compatibility, DM20-L can be integrated in GNSS related applications, such as land surveying, precise agriculture and other unmanned systems.

GENERAL

Frequency Range	410-470 MHz
Channel Spacing	12.5 kHz
Work Mode	Half-duplex
Frequency Stability	>1.5ppm
Air Baud Rate	1000bps/11000bps/12000bps/ 15000bps/18000bps
Serial Port Baud Rate	4800/9600/19200/38400/ 57600/115200bps
Power Supply	3.3 – 4V
Impedance	50ohm
Protocol Type	LoRa

RECEPTION PERFORMANCE

Receive sensitivity	Better than -118dBm@BER 10-3, 11000bps
Co-channel interference rejection	>-12dB
Received power	0.25 W
Adjacent channel selectivity	>50dB@25KHz
Spurious immunity	>50dB

EMISSION PERFORMANCE

Transmit power	0.5W/1W/2W
RF Power stability	±1dB
Adjacent channel power	>50dB
Second harmonic	<-33dBm
Emission current	< 2A (2W)

PHYSICAL & INTERFACE

I/O Interface	80-pin SMT, pin pitch 1.27mm
Antenna Interface	IPEX male connector
Size (with connector)	33×26.5×3.5mm
Weight	5 g

ENVIRONMENTAL

Operating temperature	-40℃ to +70℃
Storage temperature	-40℃ to +85℃

All specifications are subject to change without notice.

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