

SDL1

EXTERNAL DATALINK

Reliable, Real-Time, Long Range



LONG WORKING RANGE

Adopted with LoRa (Long Range) protocol and 25W high power, the SDL1 external datalink achieves up to 25km working range in ideal environments. The ultra-long working range greatly saves the time and cost of users. Also, the SDL1 is compatible with SingularXYZ Y1 GNSS receiver to extend the working range.

SUPERIOR PERFORMANCE

The air baud rate of SDL1 is adjustable, which can reach 18000bps to transmit GNSS correction data of full-constellation & triple frequency at the same time. Furthermore, with stable output power, multiple channels and easy configuration buttons, SDL1 shows superior functionality to satisfy any of your requirements.

DURABLE DESIGN

With IP67 protection level and anti-vibration design, SDL1 is not afraid of harsh environments. The unique heat sink design ensures the continuous operation of SDL1 without damage. In addition, anti-reverse power supply protection and high/low voltage warning functions make SDL1 an ultra-durable product.

GENERAL

Frequency Range	410-470 MHz
Channel Spacing	250 kHz
Work Mode	Half-duplex
Frequency Stability	1.5ppm
Modulation System	CSS
Air Baud Rate	500bps/11000bps/12500bps/ 15500bps/18000bps
Serial Port Baud Rate	4800bps/9600bps/19200bps/ 38400bps/57600bps/115200bps
Protocol Type	LoRa
Receive Sensitivity	-120dBm
Antenna Impedance	50 Ohm

ELECTRICAL

Power Supply	+10V ~ +14.5V DC
Emission Current	< 6A
Received Current ¹	50 mA
Received Power ¹	0.6W
Transmit Power	5W/25W

FREQUENCY LIST

Channel	Transmitting Frequency (MHz)	Receiving Frequency (MHz)
0	454.0500	454.0500
1	455.0500	455.0500
2	456.0500	456.0500
3	457.0500	457.0500
4	458.0500	458.0500
5	459.0500	459.0500
6	460.0500	460.0500
7	461.0500	461.0500
8	462.0500	462.0500
9	463.0500	463.0500

The default frequency can be modified according to your specific requirements.

PHYSICAL

Size	110×180×93mm
Weight	1.3 kg
Antenna Interface	N-type

ENVIRONMENTAL

Operating Temperature	-35 ℃ to +65 ℃
Storage Temperature	-45 ℃ to +85 ℃
Waterproof & Dustproof	IP67
Shock	Survive from a 2m-drop
Humidity	100% no condensing

1. The SDL1 only support RX mode currently, TX mode is reserved.

All specifications are subject to change without notice.