

LX-2™ OEM Board

Improve Positioning Accuracy with LX-2 OEM Board

key features

- Add L-Band positioning functionality to Crescent® and miniEclipse™ integrations
- Easy integration — simply stack LX-2 with a P100™ or P200™ board
- LX-2 is a drop-in replacement for the previous generation LX-1™
- Smart power management — power is off when not in use



Improve GPS positioning accuracy by adding L-Band differential capability with Hemisphere GNSS' LX-2™ OEM board. L-Band differential signal corrections are broadcast via satellites to cover most land areas worldwide. The LX-2, coupled with Hemisphere GNSS' exclusive P200™ board, can track L-Band high precision signals that improve position accuracy to better than 10 cm. Along with Hemisphere GNSS' P100™ or P200 board, the LX-2 receives L-Band DGPS differential signals that improve positioning to sub-meter accuracy. It is an ideal alternative or back up to other differential sources such as SBAS (WAAS, EGNOS, MSAS, etc.) and radiobeacon, especially in regions where those signals are difficult or impossible to track.

The LX-2 automatically tracks the best differential satellite broadcast if more than one is available in a particular region or tracks a specific satellite manually set by the user.

The LX-2 comes as an OEM board, which can be easily paired with the P200 or the P100 board for optimal performance. Integration of the two boards is simplified, as they are exactly the same size.



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GNSS Sensor Specifications

Receiver Type:	Single channel		
Channels:	1530 to 1560 MHz		
Horizontal Accuracy:	RMS (67%)	P100	P200
	L-Band DGPS: ^{1,2}	0.5 m	0.3 m
	L-Band high precision services: ^{1,2}	N/A	0.05 m

L-Band Sensor Specifications

Satellite Selection:	7.5 KHz
Update Rate:	Manual or Automatic
Reacquisition Time:	15 seconds (typical)
Sensitivity:	-130 dBm
Rejection:	15 kHz spacing >30 dB 300 kHz spacing >60 dB
Processor:	DSP for demodulation and protocol decoding (P100 and P200 modules provide processing for differential algorithms)
Command Support:	Reports L-band region and satellite information, allows input and status of L-band subscription, Bit Error Rate output for reception quality indication, manual frequency tuning

Communications

Serial Ports:	Port D on P100 and P200 (in use)
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Power

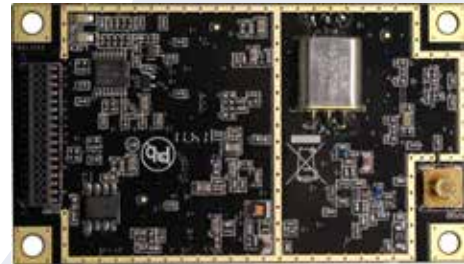
Input Voltage:	3.3 VDC +/-5%
Power Consumption:	0.72 W @ 3.3 V
Current Consumption:	210 mA @ 3.3 V
Antenna Voltage Input:	0 to 15 VDC maximum
Antenna Short Circuit Protection:	Yes
Antenna Input Impedance:	50 Ω

Environmental

Operating Temperature:	-40°C to +85°C (-40°F to +185°F)
Storage Temperature:	-40°C to +85°C (-40°F to +185°F)
Humidity:	95% non-condensing (when installed in an enclosure)
Shock and Vibration:	EP455 (when mounted in an enclosure with screw mounting holes utilized)
EMC:	FCC Part 15, Subpart B, CE (IEC 60945), CISPR22

Mechanical

Dimensions:	7.1 L x 4.1 W x 1.2 H (cm) 2.8 L x 1.6 W x 0.5 H (in)
Weight:	< .014 kg (< 0.50 oz)
Power/Data Connector:	17-pin male header, 2 rows, 0.05" pitch 17-pin female header, 2 rows, 0.05" pitch
Antenna Connectors:	MCX straight socket (male and female)

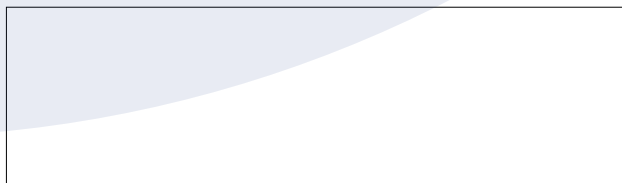


Back View

¹ Depends on multipath environment, number of satellites in view, satellite geometry and ionospheric activity

² Requires a subscription from an L-band service provider

Authorized Distributor:



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