Preliminary

AtlasLink™ GNSS Smart Antenna

Expand Your World

atlas link

key features

- **Athena™ RTK engine**
- **Atlas support over L-Band corrections**
- **Powerful web UI accessed via WiFi**
- **Internal memory for data logging, download, and upload**
- **Environment-proven enclosure for the most aggressive user scenarios**

AtlasLink™ is an all-new multi-GNSS, multi-frequency smart antenna preconfigured to receive corrections from Hemisphere's Atlas™ global corrections service. AtlasLink paired with Atlas provides you with the easiest way to receive Atlas corrections via the industry's most powerful multi-purpose GNSS smart antenna either directly from AtlasLink, or into your existing receiver.

No longer be tied to a single corrections provider requiring you to purchase their corrections that can be received by only their device. Whether you utilize Atlas corrections data on equipment that doesn't have the ability to receive L-Band signals, or would like to use Atlas corrections on systems that currently receive L-Band corrections from another source, you now have the freedom to do so. AtlasLink, in SmartLink™ or BaseLink™ mode, enables you to utilize Atlas corrections on any receiver from any vendor that supports industry standard correction formats.

AtlasLink is supported by our easy-to-use Atlas Portal (www.atlasgnss.com), which empowers you to update firmware and enable functionality, including Atlas subscriptions for accuracies from meter to sub-decimeter levels.

Hemisphere®

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AtlasLink™ GNSS Smart Antenna

GNSS Sensor Specifications

Receiver Type:	GNSS L1 & L2 RTK with carrier phase	
Signals Received:	GPS, GLONASS, BeiDou and GALILEO [4]	
Channels:	270	
GPS Sensitivity:	-142 dBm	
SBAS Tracking:	3-channel, parallel tracking	
Update Rate:	10 Hz standard, 20 Hz optional (with subscription)	
Horizontal Accuracy:		
	RMS (67%)	2DRMS (95%)
RTK: [2, 3]	10 mm + 1 ppm	20 mm + 2 ppm
L-band high precision service [2,5]:	4 cm	8 cm
SBAS (WAAS): [2]	0.3 m	0.6 m
Autonomous, no SA: [2]	1.2 m	2.5 m
Pitch / Roll Accuracy:	1° using tilt sensor	
Timing (1PPS) Accuracy:	20 ns	
Cold Start:	< 60 s typical (no almanac or RTC)	
Warm Start:	< 30 s typical (almanac and RTC)	
Hot Start:	< 10 s typical (almanac, RTC, and position)	
Maximum Speed:	1,850 kph (999 kts)	
Maximum Altitude:	18,288 m (60,000 ft)	

L-band DGNSS Sensor Specifications

Receiver Type:	Single Channel
Channels:	1530 to 1560 MHz
Sensitivity:	-130 dBm
Channel Spacing:	5 kHz
Satellite Selection:	Manual or Automatic
Reacquisition Time:	15 sec (typical)

Communications

Serial Ports:	2 full-duplex RS-232, CAN
Interface Level:	Atlas GNSS (Web UI)
Baud Rates:	4800 - 115200
Correction I/O Protocol:	Hemisphere GNSS proprietary, RTCM v2.3 (DGPS), RTCM v3 (RTK), CMR, CMR+[1]
Data I/O Protocol:	NMEA 0183, NMEA 2000, Hemisphere GNSS binary, Bluetooth 2.0 (Class 2) and WiFi
Timing Output:	1PPS, CMOS, active low, falling edge sync, 10 kΩ, 10 pF load
Event Marker Input:	CMOS, active low, falling edge sync, 10 kΩ, 10 pF load

Power

Input Voltage:	7 - 32 VDC with reverse polarity operation
Power Consumption:	5.4 W nominal (GPS L1/L2, GLONASS L1/L2, BeiDou B1/B2/B3 and L-Band)Current
Consumption:	0.39 A nominal (GPS L1/L2, GLONASS L1/L2, BeiDou B1/B2/B3 and L-Band)
Power Isolation:	No
Reverse Polarity Protection:	Yes
Antenna Voltage:	Internal Antenna

Environmental

Operating Temperature:	-40°C to +70°C (-40°F to +158°F)
Storage Temperature:	-40°C to +85°C (-40°F to +185°F)
Humidity:	95% non-condensing
Shock and Vibration:	Mechanical Shock: EP455 Section 5.41.1 Operational Vibration: EP455 Section 5.15.1 Random
EMC:	CE (ISO 14982 Emissions and Immunity), FCC Part 15, Subpart B, CISPR 22
Enclosure:	IP67

Mechanical

Dimensions:	15.8 L x 15.8 W x 7.9 H (cm) 6.2 L x 6.2 W x 3.2 H (in)
Weight:	<1.15 kg (<2.53 lbs)
Status Indications (LED):	Power, GNSS Lock, Bluetooth
Power/Data Connector:	12-pin male (metal)
Antenna Mounting:	1-14 UNS-2A female adapter, 5/8-11 UNC-2B adapter, and flat mount available

[1] Receive only, does not transmit this format

[2] Depends on multipath environment, number of satellites in view, satellite geometry, and ionospheric activity

[3] Depends also on baseline length

[4] Upgrade required

[5] Requires a subscription from L-band service provider

Note: The Eclipse receiver technology is not designed or modified to use the GPS Y-Code

Authorized Distributor:

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