AtlasLink® GNSS Smart Antenna

Expand Your World

key features

- Atlas® L-band corrections
- Athena™ RTK engine
- Powerful webUI accessed via Wi-Fi
- Internal memory for data logging, download, and upload
- Environment-proven enclosure for the most aggressive user scenarios

atlas

AtlasLink is a 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 multipurpose 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, which can only be received by their device. Whether you utilize Atlas corrections data on equipment that doesn't have the ability to receive L-band signals, or you 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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www.hgnss.com

AtlasLink GNSS Smart Antenna

GNSS Receiver Specifications

Receiver Type:	Multi-frequency, Multi-GNSS RTK
Signals Received:	GPS, GLONASS, and BeiDou
Channels:	227
GPS Sensitivity:	-142 dBm
SBAS Tracking:	3-channel, parallel tracking
Update Rate:	10 Hz standard, 20 Hz optional (with activation)
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)

Accuracy

Position:	RMS (67%)	2DRMS (95%)
Autonomous, no SA: [1]	1.2 m	2.5 m
SBAS: [1]	0.3 m	0.6 m
Atlas H10 (L-band): [1, 3]	0.04 m	0.08 m
Atlas H30 (L-band): [1, 3]	0.15 m	0.30 m
Atlas Basic (L-band): [1, 3]	0.50 m	1.0 m
RTK: [1]	8 mm + 1 ppm	15 mm + 2 ppm

L-Band Receiver Specifications

Receiver Type:	Single Channel
Channels:	1525 to 1560 MHz
Sensitivity:	-130 dBm
Channel Spacing:	5.0 kHz
Satellite Selection:	Manual and Automatic
Reacquisition Time:	15 seconds (typical)

Communications

Serial Ports:	2 x full-duplex (RS-232) 1 x CAN
Interface Level:	Atlas GNSS (webUI)
Baud Rates:	4800-115200
Correction I/O Protocol:	Hemisphere GNSS proprietary, RTCM v2.3 (DGPS), RTCM v3 (RTK)
Data I/O Protocol:	NMEA 0183, NMEA 2000, Hemisphere GNSS binary, Bluetooth 2.0 (Class 2), Wi-Fi
Timing Output:	1PPS, CMOS, active high, rising 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
Power Consumption:	3.4W nominal All Signals + L-band
Current Consumption:	0.28 A nominal All Signals + L-band
Reverse Polarity Protection:	Yes

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
Mechanical Shock:	EP455 Section 5.41.1
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:	1.05 kg (2.53 lbs)
Status Indications (LED):	Power, RTK/Atlas Float, RTK/Atlas Fixed
Power/Data Connector:	12-pin male (metal)
Antenna Mounting:	1-14 female with 5/8-11 adapter, and flat mount

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

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

3 Hemisphere GNSS proprietary

4 With future firmware upgrade and activation

Authorized Distributor:

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Hemisphere

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