MULTI-FREQUENCY, MULTI-GNSS SMART ANTENNA

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 multi-purpose GNSS smart antenna, either directly from AtlasLink or into your existing receiver.

Over are the days of being tied to a single corrections provider who requires you to purchase their corrections, which can only be received by their device. If you use 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 use 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.

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

GNSS Receiver Specifications

Receiver Type:	Multi-frequency, Multi-GNSS RTK
Signals Received:	GPS, GLONASS, BeiDou, and Atlas
Channels:	572 / 488
GPS Sensitivity:	-142 dBm
SBAS Tracking:	3-channel, parallel tracking
Update Rate:	10 Hz standard, 20 Hz optional (with subscription)

Timing (1 PPS)

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 mph (999 kts)
Maximum Altitude:	18,288 m (60,000 ft)

Accuracy

Positioning:	RMS (67%)	2DRMS (95%)
Autonomous, no SA: [1]	1.2 m	2.5 m
SBAS: [1]	0.3 m	0.6 m
Atlas H10: [1,3]	0.04 m	0.08 m
Atlas H30: [1,3]	0.15 m	0.3 m
Atlas Basic: [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 kHz
Satellite Selection:	Manual or Automatic
Reacquisition Time:	15 sec (typical)

Communications

Ports:	2x full-duplex RS-232, 1x CAN
Interface Level:	Atlas GNSS (WebUI)
Baud Rates:	4800 - 115200
Correction I/O Protocol:	Hemisphere GNSS proprietary ROX format, RTCM v2.3, RTCM v3.2, CMR[4], CMR+[4]
Data I/O Protocol:	NMEA 0183, NMEA 2000, Hemisphere GNSS binary, Bluetooth 2.0 (Class 2), Wi-Fi
Timing Output:	1 PPS, 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 also on baseline length
3. Requires a subscription from Hemisphere GNSS
4. CMR and CMR+ do not cover proprietary messages outside of the typical standard

NavtechGPS

+1-703-256-8900 or 800-628-0885
info@NavtechGPS.com
www.NavtechGPS.com

Contact NavtechGPS for product details. www.NavtechGPS.com
+1-703-256-8900 • 800-628-0885 • info@navtechgps.com