EOS
Positioning Systems

ARROW Lite®

ARROW Series®

for Submeter GPS Positioning

High-Accuracy GPS Receiver for Your Smartphone, Tablet, or Notebook Computer

The Arrow Lite® is designed specifically to use with a variety of mobile devices, including your smartphone, tablet, or notebook computer. It incorporates rock-solid, wireless Bluetooth® technology that works with Android, iOS, and Windows® devices, making it obsolete-proof. Contemplating switching from an iPhone to an Android phone or vice-versa? No problem, the Arrow lite works smoothly with both.

Use the Mobile GIS Software of Your Choice

Seems like a new mobile GIS software is being offered each week? With the Arrow Lite you will not be tied to legacy GPS receiver hardware or GIS software, it will grow with you. The Arrow Lite feeds submeter accuracy to every app on your Android or iOS device, even Google or Apple maps! Esri Collector, AmigoCloud, Mapit, GeoJot, iCMTGIS, it works seamlessly with all of them and many more mapping apps.

Real-time, Worldwide Accuracy

The Arrow Lite takes advantage of free GPS SBAS corrections in most regions of the world, North America is covered by WAAS, Europe and North Africa by EGNOS, India is covered by GAGAN, and Japan by MSAS. The above-mentioned free SBAS services provide 60 cm real-time accuracy.

Key Features:

- Submeter GPS
- 100 % Android, iOS, Windows compatible
- 60 cm real-time accuracy using free SBAS
- Supports all mobile GIS softwares

Works Where Other Receivers Can't

The Arrow Lite was designed specifically with GIS users in mind. It squeezes more accuracy from SBAS corrections than any other receiver in the world. With its patented technology, you can use it under trees, around buildings, and in rugged terrain where other receivers will fail to deliver. Your efficiency will be optimized because you will get real-time results in the field! No post-processing is required.

For more details,
www.eos-gnss.com

Specifications

GPS Sensor

Receiver Type:	L1, C/A code, with carrier phase smoothing
Channels:	12-channel, parallel tracking
SBAS Support:	2-channel, parallel tracking WAAS, EGNOS, MSAS, GAGAN, and compatible
Update Rate:	1 Hz Default, optional 10 Hz, 20 Hz
DGPS Horizontal Accuracy:	< 60 cm 2dRMS, 95% confidence [1]
Horizontal Accuracy:	< 2.5 m 2dRMS, 95% confidence [1] (autonomous, no SA)
Optional Proprietary RTCM:	< 20 cm 2dRMS, 95% confidence [2]
Optional Proprietary L1 RTK:	< 5 cm 2dRMS, 95% confidence [2]
Cold Start:	60 sec (no almanac or RTC)
Reacquisition:	< 1 sec
Maximum Speed:	1607 kph (999 mph)
Maximum Altitude:	18,288 m (60,000 ft)

Communication

Ports:	Bluetooth, USB 2.0, serial (optional)
Bluetooth Transmission:	Class 1, 300 m typical range[3], up to 1 km
Bluetooth Frequency:	2.400 – 2.485 GHz
Fully Bluetooth Pre-Qualified:	Bluetooth 2.1 + EDR
Supported Bluetooth Profiles:	SPP and iAP
Data I/O Protocol:	NMEA 0183, Binary
Data Output Datum (SBAS):	ITRF08 (current year epoch)
Raw Measurement Data:	Binary and RINEX
Correction I/O Protocol:	RTCM SC-104, Optional Proprietary format
Status LED:	Power, GPS, DGPS, DIFF, Bluetooth
Battery Gas Gauge:	5 LED Indicators

Power

Battery Type:	Field replaceable Lithium-Ion pack (Rechargeable in unit or separately)
Battery Capacity:	Battery Operating Time: 15+ hours[4]
Charging Time:	4 hours (vehicle charger available)
Antenna Voltage Output:	5 VDC
Antenna Input Impedance:	50 Ohms

Environmental

Operating Temperature:	-40°C to +85°C (-40°F to +185°F)[3]
Storage Temperature:	-40°C to +85°C (-40°F to +185°F)
Humidity:	95% non-condensing
Compliance:	FCC, CE, RoHS and Lead-free

Mechanical

Enclosure Material:	Xenoy
Enclosure Rating:	Waterproof, IP-67
Immersion:	30 cm, 30 minutes
Dimensions:	12.5 x 8.4 x 4.2 cm (4.92 x 3.3 x 1.65 in.)
Weight:	372 g (0.82 lbs)
Data Connectors:	Mini USB Type B Receptacle
Antenna Connector:	SMA Female

Antenna

GPS Frequency Range:	L1 (1575 MHz +/- 10 MHz)
Gain (without cable):	26.5 dB (+/- 2 dB), 35mA
Voltage:	+4.5 to + 15 VDC
Impedance:	50 Ohms
Dimensions:	6.6 diam. x 2.7 cm (2.61 x 1.05 in.)
Weight (without cable):	114 g (0.25 lbs) (with removable magnet mount)
Antenna Connector:	SMA Female
Finish:	Fluid Resistant
Temperature:	-55°C to +70°C (-67°F to +158°F)
Humidity:	Immersion 30 cm, 30 minutes

Standard Accessories

Li-Ion Battery Pack (Field replaceable)
12VDC Power Supply
Belt/Shoulder Carrying Case
Precision Antenna with 1.5 m cable
Soft Hat for antenna
USB cable

Field Activated Options

10 Hz or 20 Hz Output rate

NOTES :
1. Depends on multipath environment, number of satellites in view, satellite geometry, baseline length (for local services) and ionospheric activities
2. Option required on both base and rover. Also requires communication link between base and rover
3. Transmission in free space
4. Lithium-Ion battery performance degrades below -20°C (-4°F)

Made in Canada

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