



## High-Accuracy GNSS receiver for your smartphone, tablet or notebook computer

*The Arrow 100 is designed specifically to use with a variety of mobile devices, including your smartphone, tablet or notebook computer. The Arrow 100 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 100 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 100 you will not be tied to legacy GNSS receiver hardware or GIS software, the Arrow 100 will grow with you. The Arrow 100 feeds submeter accuracy to every app on your Android or iOS device, even Google or Apple maps!

TerraGo Edge, Esri Collector/ArcPad/ArcMobile, Fulcrum, AmigoCloud, TerraFlex, MapItFast, GeoJot, CMTGIS, the Arrow Lite works seamlessly with all of them and many more mapping apps.

### Real-time, World-wide Accuracy

The Arrow 100 takes advantage of GPS, GLONASS (optionally Galileo, BeiDou, QZSS) and free SBAS corrections in most regions of the world. North America is covered by WAAS.

Europe and North Africa are covered by EGNOS. India is covered by GAGAN. Japan is covered by MSAS. The free SBAS services mentioned above provide 60cm real-time accuracy. For those regions not covered by a free SBAS, Eos has partnered with OmniSTAR to provide real-time, submeter accuracy in South America, Australia and Central/Southern Africa.

# ARROW 100™

*ARROW Series*

for Submeter GNSS Positioning

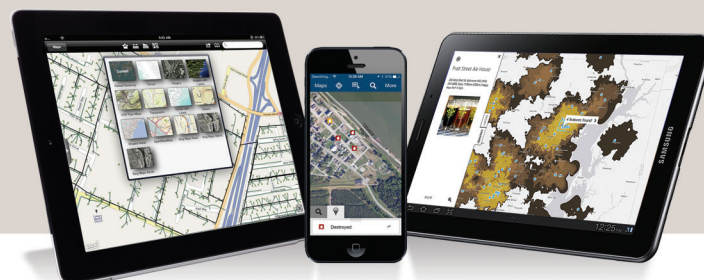
### Key Features:

- Full GNSS: GPS/GLONASS/Galileo/BeiDou/QZSS
- 100% Android, iOS, Windows compatible.
- 60cm real-time accuracy using free SBAS
- Supports all Mobile GIS Software
- Supports Atlas™ H100 service



### Works Where Other Receivers Can't

The Arrow 100 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 the Arrow 100 under trees, around buildings and in rugged terrain where other receivers will fail to deliver. Where having GPS is just not enough, the Arrow 100 uses GLONASS (and optionally Galileo/BeiDou/QZSS) signals from at least 24 extra satellites. Real-time results in the field optimize your efficiency! No post-processing required.



For more details,  
[www.eos-gnss.com](http://www.eos-gnss.com)

# Specifications

## GPS Sensor

Receiver Type:	L1/G1/B1, GPS + GLONASS + BeiDou (Galileo and QZSS optional) with carrier smoothing
Channels:	158-channel, parallel tracking
Number of tracked satellites:	12 GPS (15 when no SBAS) 12 GLONASS 22 BeiDou 15 Galileo (future firmware) 15 QZSS (future firmware)
SBAS Support:	3-channel, parallel tracking WAAS, EGNOS, MSAS, GAGAN (SBAS ranging where supported)
Update Rate:	1Hz Default, optional 10Hz and 20Hz
DGNSS Horizontal Accuracy:	< 30cm HRMS
SBAS Accuracy:	< 60cm 2dRMS, 95% confidence <sup>1</sup> (< 30cm HRMS, < 25cm CEP)
Horizontal Accuracy:	< 2.5m 2dRMS, 95% confidence <sup>1</sup> (autonomous, no SA)
Optional Proprietary RTCM:	< 20cm 2dRMS, 95% confidence <sup>1</sup>
Optional Single Frequency RTK:	1cm + 1ppm <sup>1</sup>
Cold Start:	< 60 sec typical (no almanac or time)
Reacquisition:	< 1sec
Maximum Speed:	1,850 kph / 1,150 mph / 999 knots
Maximum Altitude:	18,288m (60 000 ft)

## Communication

Port:	Bluetooth, USB 2.0
Bluetooth Transmission:	Class 1, 300m typical range <sup>2</sup> , up to 1km
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, RTCM SC-104, Binary
Raw Measurement Data:	Binary and RINEX
Correction I/O Protocol:	RTCM, Optional Proprietary format
GNSS Status LED:	Power, GNSS, DGNSS, DIFF, Bluetooth
Battery Status LED:	5 LED Indicator

## Power

Battery type:	Field replaceable Lithium-Ion pack (Rechargeable in unit or separately)
Battery Capacity:	Battery Operating Time: 10+ hours <sup>3</sup>
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) <sup>3</sup>
Storage Temperature:	-40°C to +85°C (-40°F to +185°F)
Humidity:	95% non-condensing
Compliance:	FCC, CE, RoHS and Lead-free



Eos Positioning Systems Inc.  
Terrebonne (Quebec), Canada  
Tel: (450) 824-3325  
[www.eos-gnss.com](http://www.eos-gnss.com) | [info@eos-gnss.com](mailto:info@eos-gnss.com)

## Mechanical

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

## Antenna

Frequency Range:	L1, G1, B1 (1,525 MHz - 1,607 MHz)
Gain (without cable):	26 dB (+/- 2 dB), 35 mA
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):	114g (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

## Standard Accessories

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


## Field Activated Options

10Hz, 20Hz Output Rate  
Base Station RTCM Output  
L1/G1 RTK for 1-3cm

### NOTES :

1. Depends on multipath environment, number of satellites in view, satellite geometry, baseline length (for local services) and ionospheric activities
2. Transmission in free space
3. Lithium-Ion battery performance degrades below -20°C (-4°F)

© Copyright July 2014, Eos Positioning Systems Inc. All rights reserved. Specifications subject to change without notice. Arrow Lite™, Arrow Series™ are trademarks of Eos Positioning Systems Inc., Canada. The Bluetooth™ trademarks are owned by Bluetooth SIG, Inc, U.S.A. All other trademarks are the property of their respective owners.

Made in Canada 

Authorized Distributor