



# ARROW SERIES<sup>™</sup> High Accuracy Field Mobility

Submeter with SBAS, 1cm with RTK SafeRTK<sup>™</sup>for poor cell coverage areas GPS/Glonass/Galileo/BeiDou, L1/L2/L5 4cm real-time accuracy anywhere in the world

WWW.EOS-GNSS.COM

Made in Canada

# **ARROW SERIES RECEIVERS**

E S Positioning Systems	Arrow Lite"	Arrow 100'	Arrow 200°	Arrow Gold
Description	Single Frequency, Single Constellation	Single Frequency, Multi-Constellation	Dual-Frequency, Multi-Constellation	Triple-Frequency, Multi-Constellation
GNSS Frequency	L1 GPS	L1 GNSS	L1/L2 GNSS	L1/L2/L5 GNSS
Constellations	GPS	GPS, GLONASS, Galileo, BeiDou	GPS, GLONASS, Galileo, BeiDou	GPS, GLONASS, Galileo, BeiDou, QZSS
Const. Used	1	4 concurrent	4 concurrent	All in-view
SBAS Support	~	4	×	1
SBAS Accuracy	30 - 60 cm	30 - 60 cm	30 - 60 cm	30 - 60 cm
L-Band	X	x	x	Atlas Basic / H30 / H10
L-Band Accuracy	x	х	x	30cm / 15 cm / 4 cm
SafeRTK <sup>™</sup> Support	x	х	x	1
RTK Accuracy	x	Sub-foot,1 - 3 cm <sup>1</sup>	1 cm	1 cm
✤ iPhone/iPad		4	1	1
✤ Android/Win.		1	1	1
Serial Port	Option	Option	Option	~
Output Rate	10Hz/20Hz	10Hz/20Hz	10Hz/20Hz	10Hz/20Hz
Battery Autonomy	16+ hours	12+ hours	9+ hours	8+ hours

### WWW.EOS-GNSS.COM

1. Single baseline < 10 km. Supports RTK Networks

info@eos-gnss.com

Terrebonne, Qc., Canada Tel: +1 (450) 824-3325

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### The World's Most Advanced GNSS receiver for Every Mobile Device

The Arrow Gold<sup>®</sup> is the first high-accuracy iOS, Android, and Windows Bluetooth<sup>®</sup> GNSS receiver to implement all four global constellations (GPS, GLONASS, Galileo, BeiDou), three frequencies (L1, L2, L5), and satellite-based RTK augmentation. The Arrow Gold works with all apps that run on iOS, Android, and Windows devices. It also supports all planned global satellite constellations, giving it an awesome return on investment that will serve you well into the next decade and beyond.

#### RTK Everywhere - Even in Poor Cell Coverage Areas

The Arrow Gold offers a new feature called SafeRTK<sup>™</sup>. There is nothing more frustrating than trying to stay connected to an RTK network in areas with poor cell coverage. This feature is the answer. When the Arrow Gold loses connection to the RTK network, SafeRTK takes over in a few seconds and allows it to maintain RTK-level accuracy for up to 20 minutes (unlimited with Atlas<sup>™</sup> subscription), until the Arrow Gold is automatically reconnected to the RTK network. This results in smooth, RTK accuracy even in areas with poor cell coverage.

#### No RTK Network Access Available? Pioneering Low-Cost Global Satellite

Do you work in an area without an RTK network available? The Arrow Gold features a 4 cm, real-time satellite correction service available anywhere in the world. Using all four constellations and signals, the Arrow Gold offers convergence times as low as 15 minutes anywhere in the world, at a revolutionary price point that works with all iOS, Android, and Windows devices. ARROW Gold® ARROW Series® for 1cm RTK Accuracy, with SafeRTK\*\*

#### Key Features:

- Supports GPS, GLONASS, Galileo, BeiDou, QZSS
- Triple-Frequency support
- 1 cm RTK real-time accuracy
- Long-range RTK baselines up to 50 km
- SafeRTK for poor cell coverage areas
- Worldwide satellite correction service
- 100% iOS, Android, and Windows compatibility



### The Ultimate Accuracy for Your iOS, Android, or Windows Device

Of course, iOS, Android, and Windows compatibility is our expertise. Eos has the most advanced connectivity with all mobile devices and free software utilities to ensure compatibility with apps like Esri Collector, Survey123, QuickCapture and many other mobile GIS software apps.



For more details, www.eos-gnss.com

#### **GPS Sensor** .

Receiver Type:	GNSS multi-frequency RTK with carrier phase
Signals Received:	GPS: L1CA, L1P, L1C, L2P, L2C, L5
	GLONASS: G1, G2, P1, P2
	Galileo: E1BC, E5a, E5b
	BeiDou: B1, B2, B3 (without L5)
	QZSS: L1CA, L1C, L2C, L5
Number of Tracked Satellites:	12 GPS (15 when no SBAS)
	12 GLONASS
	22 BeiDou
	15 Galileo
	4 QZSS
SBAS Support:	3-channel, parallel tracking
	WAAS/EGNOS/MSAS/GAGAN (with SBAS ranging)
L-Band (Atlas):	1
Update Rate:	1 Hz Default, Optional 10 Hz and 20 Hz
RTK Accuracy:	1 cm <sup>1</sup> + 1 ppm Horizontal
SBAS Accuracy:	2 cm <sup>1</sup> + 1 ppm Vertical < 30 cm HRMS <sup>1</sup> , < 60 cm 2dRMS
Atlas Accuracy (RMS):	H10: 4 cm
Allas Accuracy (RMS).	
	H30: 15 cm
	H100: 30 cm
Autonomous Accuracy:	1.2 meters HRMS <sup>1</sup>
Cold Start:	< 60 sec typical (no almanac or time)
Reacquisition:	< 1 sec
Max Speed:	1,850 kph (1,150 mph / 999 knots)
Max Altitude:	18,288 meters / 60,000 ft

#### Communication

Port: Bluetooth, USB 2.0, Serial (Optional) Class 1, 300 m typical range<sup>2</sup>, up to 1 km Bluetooth Transmission: 2.400 - 2.485 GHz Frequency: Fully Bluetooth Pre-Qualified: Bluetooth 2.1 + EDR Supported Bluetooth Profiles: SPP and iAP Data I/O formats: NMEA 0183, RTCM SC-104, Binary Output Datum: Autonomous: WGS-84 (G1674) Epoch 2005.0 SBAS & Atlas: ITRF08 (current year epoch) RTK: Same as RTK base Binary and RINEX Raw Measurement Data: Correction I/O Protocol: RTCM 2.x, 3.x, CMR, CMR+, proprietary binary GPS Status LEDs: Power, GNSS, DGNSS, DIFF, Bluetooth Battery Status LED: 5 LED Indicator Timing Output: 1PPS, CMOS, active high, rising edge sync, 10 kΩ, (with optional serial port) 10 pF load CMOS, active low, falling edge sync, 10kΩ, Event Marker Input: (with optional serial port) 10 pF load

#### Power

Battery Type:

Battery Autonomy: Charging Time:

Field replaceable, rechargeable Lithium-Ion pack (rechargeable inside unit or separately) 8.5 hrs³ (Atlas<sup>™</sup> OFF) - 7+ hrs³ (Atlas<sup>™</sup> ON) 4 hours (vehicle charger available)

#### Environmental .

Operating Temperature: Storage Temperature: Humidity: Compliance:

-40°C to +85°C (-40°F to +185°F)<sup>3</sup> -40°C to +85°C (-40°F to +185°F) 95% non-condensing FCC, CE, RoHS and Lead-free

#### Mechanical -

Enclosure Material: **Enclosure Rating:** Immersion: Dimensions: Weight: Data Connectors: Antenna Connector:

Waterproof, IP-67 30 cm, 30 minutes 12.5 x 8.4 x 4.2 cm (4.92 x 3.3 x 1.65 in.) 372 g (0.82 lbs) Mini USB Type B Receptacle SMA Female

#### Antenna .

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GPS Freq Range:	1525 - 1606 MHz, 1164 - 1254 MHz
mpedance:	50 Ohms
Gain (no cable):	30 dB (± 2 dB)
NA Noise Figure:	2.5 dB Max at 25°C
/oltage:	+2.5 to +16 VDC
Connector:	SMA female
Dimensions:	69 mm diam. x 22 mm (2.72 x 0.87 in.)
Veight:	170 g (0.374 lbs)
Femperature:	-40°C to +85°C (-40°F to + 185°F)
Humidity:	Waterproof

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#### Standard Accessories

Li-Ion Battery Pack (Field replaceable)
12VDC Power Supply
USB Cable
L1/L2/L5, L-Band GNSS Antenna

Pole Bracket and Clamp Hard Shell Carrying Case Antenna Cable Antenna Mounting Plate

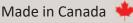
#### Field Activated Options -

10 Hz, 20 Hz Output Rates

NOTES :

- 1. Depends on multipath environment, number of satellites in view, satellite geometry, baseline length (for local services) and ionospheric activities. Stated accuracies for baseline lengths of up to 50km
- Transmission in free space Transmission in free space
  Lithium-Ion battery performance degrades below -20°C (-4°F)

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Authorized Distributor



Eos Positioning Systems Inc. Terrebonne (Quebec), Canada Tel: (450) 824-3325 www.eos-gnss.com l info@eos-gnss.com



### The World's First RTK Receiver for Every Mobile Device

The Arrow 200° is the world's first GNSS receiver able to provide 1 cm real-time accuracy on your Android, iOS, and Windows mobile device. Yes, you can enjoy 1 cm accuracy on your iPhone or Samsung Galaxy running Esri Collector for ArcGIS, Survey123, or whatever field data collection software you prefer.

Designed for use with a broad range of mobile devices, from smartphones to tablets and notebook computers, the Arrow 200 incorporates rock-solid, wireless Bluetooth technology that works smoothly with Android, iOS, and Windows devices, making it obsolete-proof and portable across platforms.

#### Use the Mobile GIS Software of Your Choice

Seems like a new mobile GIS software is being offered each week? With the Arrow 200 you will not be tied to legacy GNSS receiver hardware or GIS software, it will grow with you. The Arrow 200 feeds 1 cm RTK accuracy to every app on your Android or iOS device, even Google or Apple maps! Esri Collector for ArcGIS, Survey123, QuickCapture, AmigoCloud, Mapit, Futura, iCMTGIS PRO, it works seamlessly with all of them and many more mapping apps.

#### Uses All Four Global Constellations

The Arrow 200 incorporates premium features that place it among the highest performing receivers in the world. It takes advantage of all existing satellite constellations: GPS, GLONASS, Galileo, BeiDou, and free SBAS corrections, to deliver top-notch, 1 cm RTK performance anywhere in the world when connected to an RTK network or base station.



#### Key Features:

- Supports existing GNSS (GPS, GLONASS, Galileo, BeiDou)
- Dual-Frequency support
- 100% Android, iOS, Windows compatibility
- 1 cm RTK real-time accuracy
- Supports all mobile GIS software



#### The Ultimate in Worldwide High-Precision GNSS Technology

The Arrow 200 provides the ultimate in flexibility. Using your smartphone, tablet, or notebook computer, it can deliver 1 cm real-time accuracy when connected to an RTK network or RTK base.



For more details, www.eos-gnss.com

#### **GPS** Sensor

GPS Sensor	
Receiver Type:	GNSS dual-frequency RTK with carrier phase
Signals Received:	GPS, GLONASS, Galileo, BeiDou
Channels:	372-channel, parallel tracking
Number of Tracked Satellites:	12 GPS (15 when no SBAS)
	12 GLONASS
	15 Galileo
	22 BeiDou
SBAS Support:	3-channel, parallel tracking
	WAAS/EGNOS/MSAS/GAGAN (with SBAS ranging)
Update Rate:	1 Hz Default, optional 10 Hz and 20 Hz
RTK Accuracy:	1 cm <sup>1</sup> + 1 ppm Horizontal
	2 cm <sup>1</sup> + 1 ppm Vertical
SBAS Accuracy:	<30 cm HRMS <sup>1</sup>
Autonomous Accuracy:	1.2 meters HRMS <sup>1</sup>
Cold Start:	< 60 sec typical (no almanac or time)
Reacquisition:	< 1 sec
Max Speed:	1,850 kph (1,150 mph / 999 knots)
Max Altitude:	18,288 m (60,000 ft)
Communication	

#### Communication

Port:	Bluetooth, USB 2.0, serial (optional)
Bluetooth Transmission:	Class 1, 300 m typical range <sup>2</sup> , up to 1 km
Frequency:	2.400 - 2.485 GHz
Fully Bluetooth Pre-Qualified:	Bluetooth 2.1 + EDR
Supported Bluetooth Profiles:	SPP and iAP
Data I/O formats:	NMEA 0183, RTCM 104, Binary
Output Datum: Autonomous	s: WGS-84 (G1674) Epoch 2005.0
SBAS	: ITRF08 (current year epoch)
RTK	: Same as RTK base
Raw Measurement Data:	Binary and RINEX
Correction I/O Protocol:	RTCM 2.x, 3.x, CMR, CMR+, proprietary binary
GNSS Status LEDs:	Power, GNSS, DGNSS, DIFF, Bluetooth
Battery Status LED:	5 LED Indicator
Timing Output:	1PPS, CMOS, active high, rising edge sync.
	10 k $\Omega$ , 10 pF load (with optional serial port)
Event Marker Input:	

10 kΩ, 10 pF load (with optional serial port)

#### Power

Battery Type:

Battery Life: Charging Time: Field replaceable, rechargeable Lithium-Ion pack. Rechargeable inside unit or separately Battery operating time 9+ hours<sup>3</sup> 4 hours (vehicle charger available)

#### Environmental \_

Operating Temperature: Storage Temperature: Humidity: Compliance:

-40°C to +85°C (-40°F to +185°F)3 -40°C to +85°C (-40°F to +185°F) 95% non-condensing FCC, CE, RoHS and Lead-free



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#### Mechanical \_

Enclosure Material:
Enclosure Rating:
Immersion:
Dimensions:
Weight:
Data Connectors:
Antenna Connector:

Xenoy Waterproof, IP-67 30 cm, 30 minutes 12.5 x 8.4 x 4.2 cm (4.92 x 3.3 x 1.65 in.) 372 g (0.82 lbs) Mini USB Type B Receptacle SMA Female

#### Antenna -

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PS Freq Range:	1525 - 1606 MHz, 1164 - 1254 MHz
pedance:	50 Ohms
ain (no cable):	30 dB ±2dB
bise Figure:	2.5 dB Max at 25°C
ltage:	+2.5 to +16 VDC
onnector:	SMA female
mensions:	69 mm diam. x 22 mm (2.72 x 0.87 in.
eight:	170 g (0.374 lbs)
mperature:	-40°C to +85°C (-40°F to + 185°F)
imidity:	Waterproof

#### Standard Accessories -

Li-Ion Battery Pack (Field replaceable) 12VDC Power Supply USB Cable Multi-Frequency GNSS Antenna

Pole Bracket and Clamp Hard Shell Carrying Case Antenna Cable Antenna Mounting Plate

#### Field Activated Options .

10Hz, 20Hz Output Rates

#### NOTES :

1. Depends on multipath environment, number of satellites in view, satellite geometry, baseline length (for local services) and ionospheric activities. Stated accuracies for baseline lengths of up to 30 km

2. Transmission in free space

3. Lithium-Ion battery performance degrades below -20°C (-4°F)

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### 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. It incorporates rock-solid, wireless Bluetooth<sup>®</sup> technology that works with Android, iOS, and Windows<sup>®</sup> 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, it will grow with you. The Arrow 100 feeds submeter accuracy to every app on your Android or iOS device, even Google or Apple maps! Esri Collector, Survey123 and QuickCapture, Futura, AmigoCloud, Mapit, GeoJot, iCMTGIS, it works seamlessly with all of them and many more mapping apps.

#### Real-time, Worldwide Accuracy

The Arrow 100 takes advantage of GPS, GLONASS, Galileo, BeiDou, and free SBAS corrections in most regions of the world. For SBAS, North America is covered by WAAS, Europe and North Africa by EGNOS, India is covered by GAGAN, Japan by MSAS, and Australasia by their own system. With the above-mentioned free SBAS the Arrow 100 provides 30 to 60 cm real-time accuracy. ARROW 100<sup>®</sup> ARROW Series<sup>®</sup> for Submeter GNSS Positioning

#### Key Features:

- Full GNSS (GPS, GLONASS, Galileo, BeiDou)
- 100 % Android, iOS, Windows compatible
- 30 to 60 cm real-time accuracy using free SBAS
- Supports all mobile GIS software



#### 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 it 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, Galileo, and BeiDou signals from at least 100 satellites. Real-time results in the field optimize your efficiency with no post-processing required!



For more details, www.eos-gnss.com

#### GPS Sensor \_\_

Receiver Type:

Channels: Number of Tracked Satellites:

SBAS Support:

Update Rate: DGNSS Horizontal Accuracy: SBAS Accuracy:

Horizontal Accuracy:

Optional Proprietary RTCM: Optional Single Frequency RTK: Cold Start: Reacquisition: Maximum Speed: Maximum Altitude:

#### Communication \_\_\_\_\_

Port: Bluetooth Transmission: Bluetooth Frequency: Fully Bluetooth Pre-Qualified: Supported Bluetooth Profiles: Data I/O Protocol: Raw Measurement Data: Correction I/O Protocol: GNSS Status LED: Battery Status LED:

#### Power .

Battery Type:

Battery Capacity: Charging Time: Antenna Voltage Output: Antenna Input Impedance:

#### Environmental \_

Operating Temperature: Storage Temperature: Humidity: Compliance: L1/G1/E1/B1, GPS, GLONASS, Galileo, BeiDou with carrier smoothing 158-channel, parallel tracking 12 GPS (15 when no SBAS) 12 GLONASS 15 Galileo 22 BeiDou 3-channel, parallel tracking WAAS, EGNOS, MSAS, GAGAN (SBAS ranging where supported) 1 Hz Default, optional 10 Hz and 20 Hz < 30 cm HRMS < 60 cm 2dRMS, 95% confidence<sup>1</sup> (< 30 cm HRMS, < 25 cm CEP) < 2.5 m 2dRMS, 95% confidence1 (autonomous, no SA) < 20 cm 2dRMS, 95% confidence<sup>1</sup> 1 cm + 1 ppm<sup>1</sup> < 60 sec typical (no almanac or time) < 1 sec 1,850 kph / 1,150 mph / 999 knots 18,288 m (60 000 ft)

### Bluetooth, USB 2.0, serial (optional)

Class 1, 300 m typical range<sup>2</sup>, up to 1 km 2.400 - 2.485 GHz Bluetooth 2.1 + EDR SPP and iAP NMEA-0183, RTCM SC-104, Binary Binary and RINEX RTCM, Optional Proprietary format Power, GNSS, DGNSS, DIFF, Bluetooth 5 LED Indicator

Field replaceable, rechargeable Lithium-lon pack (rechargeable inside unit or separately) Battery Operating Time: 12+ hours<sup>3</sup> 4 hours (vehicle charger available) 5 VDC 50 Ohms

-40°C to +85°C (-40°F to +185°F)<sup>3</sup> -40°C to +85°C (-40°F to +185°F) 95% non-condensing FCC, CE, RoHS and Lead-free

#### Mechanical

Enclosure Material: Enclosure Rating: Immersion: Dimensions: Weight: Data Connectors: Antenna Connector:

#### Antenna .

Frequency Range: Gain (without cable): Voltage: Impedance: Dimensions: Weight (without cable):

Antenna Connector:

Finish: Temperature: Immersion:

#### **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, 20 Hz Output Rate Base Station RTCM Output Single Frequency RTK for 1-3 cm

NOTES :

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

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Xenoy Waterproof, IP-67 30 cm, 30 minutes 12.5 x 8.4 x 4.2 cm (4.92 x 3.3 x 1.65 in.) 372 g (0.82 lbs) Mini USB Type B Receptacle SMA Female

L1, G1, E1, B1 26 dB (+/- 2 dB), 35 mA +4.5 to +15 VDC 50 Ohms 6.6 diam. x 2.7 cm (2.61 x 1.05 in.) 114 g (0.25 lbs) with removable magnet mount) SMA Female Fluid Resistant -55°C to +70°C (-67°F to +158°F) 30 cm, 30 minutes

RevF-2020/05/07



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

The Arrow Lite<sup>®</sup> is designed specifically to use with a variety of mobile devices, including your smartphone, tablet, or notebook computer. It incorporates rock-solid, wireless Bluetooth<sup>®</sup> technology that works with Android, iOS, and Windows<sup>®</sup> 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.



#### GPS Sensor

Receiver Type: Channels: SBAS Support:

Update Rate: DGPS Horizontal Accuracy:

Horizontal Accuracy:

Optional Proprietary RTCM: **Optional Proprietary L1 RTK:** Cold Start: Reacquisition: Maximum Speed: Maximum Altitude:

#### Communication

Ports: **Bluetooth Transmission: Bluetooth Frequency:** Fully Bluetooth Pre-Qualified: Supported Bluetooth Profiles: Data I/O Protocol: Data Output Datum (SBAS): Raw Measurement Data: Correction I/O Protocol:

Battery Gas Gauge:

Status LED:

Power -Battery Type:

**Battery Capacity:** Charging Time: Antenna Voltage Output: Antenna Input Impedance:

#### Environmental .

**Operating Temperature:** Storage Temperature: Humidity: Compliance:

5 VDC 50 Ohms -40°C to +85°C (-40°F to +185°F)3 -40°C to +85°C (-40°F to +185°F)

95% non-condensing

FCC, CE, RoHS and Lead-free

L1, C/A code, with carrier phase smoothing

12-channel, parallel tracking

2-channel, parallel tracking

and compatible

(autonomous, no SA)

1607 kph (999 mph)

18,288 m (60,000 ft)

2.400 – 2.485 GHz

SPP and iAP

Bluetooth 2.1 + EDR

NMEA 0183, Binary

Binary and RINEX

**5 LED Indicators** 

ITRF08 (current year epoch)

< 1 sec

WAAS, EGNOS, MSAS, GAGAN,

1 Hz Default, optional 10 Hz, 20 Hz

< 60 cm 2dRMS, 95% confidence <sup>1</sup>

< 2.5 m 2dRMS, 95% confidence 1

< 20 cm 2dRMS, 95% confidence <sup>2</sup>

Bluetooth, USB 2.0, serial (optional)

Class 1, 300 m typical range<sup>3</sup>, up to 1 km

RTCM SC-104, Optional Proprietary format

Power, GPS, DGPS, DIFF, Bluetooth

Field replaceable Lithium-Ion pack

(Rechargeable in unit or separately) Battery Operating Time: 15+ hours<sup>4</sup>

4 hours (vehicle charger available)

< 5 cm 2dRMS, 95% confidence <sup>2</sup>

60 sec (no almanac or RTC)

Mechanical \_

Enclosure Material:
Enclosure Rating:
Immersion:
Dimensions:
Weight:
Data Connectors:
Antenna Connector:

Xenoy Waterproof, IP-67 30 cm, 30 minutes 12.5 x 8.4 x 4.2 cm (4.92 x 3.3 x 1.65 in.) 372 g (0.82 lbs) Mini USB Type B Receptacle 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
- Transmission in free space
- 4. Lithium-Ion battery performance degrades below -20°C (-4°F)

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# **ARROW SERIES**

High Accuracy GNSS Receivers For Real-Time Location On Any Device

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ARROW 100 Submeter & Subfoot GNSS ARROW GOLD





Submeter, CM, RTK

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