ARROW 200®

ARROW Series®

for 1-3cm Accuracy with RTK

EOS Positioning Systems

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

Specifications

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[1] + 1 ppm Horizontal 2 cm[1] + 1 ppm Vertical
SBAS Accuracy:	<30 cm HRMS[1]
Autonomous Accuracy:	1.2 meters HRMS[1]
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

Port:		Bluetooth, USB 2.0, serial (optional)
Bluetooth Transmission:		Class 1, 300 m typical range[2], up to 1 km
Frequency:		2.400 - 2.485 GHz
Fully Bluetooth Pre-Qualified:		Bluetooth 2.1 + EDR
Supported Bletooth Profiles:		SPP and iAP
Data I/O formats:		NMEA 0183, RTCM SC-104, Binary
Output Datum:	Autonomous:	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 kΩ, 10 pF load (with optional serial port)
Event Marker Input:		CMOS, active low, falling edge sync. 10 kΩ, 10 pF load (with optional serial port)

Power

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

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

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

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

Made in Canada

Authorized Distributor

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