

Precision GPS

XF101™ DGPS Receiver for the Archer Field PC®



The Archer with the sub-meter XF101 DGPS receiver provides an all-in-one handheld computer ready for rapid-fire, mobile GIS in extreme environments.

Rock Solid, Field Ready – Delivering sub-meter DGPS

The Hemisphere GPS XF101 receiver with the ultra-rugged Archer Field PC provides superior accuracy and performance. Depend on it to accurately map, collect, or update geospatial data in the toughest environments.



Hemisphere GPS - A Leader in Precision GPS

Hemisphere GPS brings innovative technology to the XF101 DGPS receiver. Position accuracy and stability are optimized by their exclusive Crescent® Receiver Technology for sub-meter accuracy. COAST™ technology maintains accuracy during loss of differential signal. Robust multipath mitigation and accurate code phase measurement result in high quality DGPS performance.

Real Time or Post-process Positions

With the XF101 and Archer, collect real-time DGPS positions using SBAS corrections, or post-process to enhance position accuracy back in the office.

With the Archer's powerful Windows Mobile®, you have an extensive choice in application software for mobile GIS and location-based applications. Use industry standard software such as ArcPad® with the GNSS Driver extension for post-processing with EZSurv™.

Accurate, Versatile, Rugged

If you are looking for a robust, reliable, rugged field computer with DGPS sub-meter capability for your mobile GIS operations, the XF101 DGPS receiver with the Archer is your solution. Use it in forestry, agriculture, public works, construction, public safety and other applications when accurate location-based information is critical to success.

> Features

- **Crescent® GPS technology for superior sub-meter accuracy**
- **COAST™ Technology maintains accuracy during temporary loss of differential signal**
- **Optional external antenna for additional accuracy**
- **Low power consumption conserves Archer battery power**
- **Easy to use, modular - connect to Archer and go to the field**



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XF101 Components

1. GPS Module
2. CF Card Interface Module

The XF101 CF Card Interface and GPS modules are easily installed onto the Archer. The XF101 with the Archer is fully integrated, sealed (IP67), and ready to go to the field.

Powered by
Crescent



DGPS Receiver

GPS Sensor Specifications

Receiver Type:	L1 (C/A), with carrier phase smoothing
Channels:	12-channel parallel tracking (10-channel when tracking SBAS)
SBAS Tracking:	2-channel, parallel tracking
Update Rate:	1 Hz
Horizontal Accuracy:	<0.4 m RMS (DGPS)* <0.3 m RMS (DGPS, external antenna)* <1.8 m RMS (autonomous, no SA)*
Cold Start:	60 s (no almanac or RTC)
Warm Start Time 1:	45 s (valid almanac, no RTC)
Warm Start Time 2:	35 s (valid almanac and RTC)
Hot Start Time:	20 s typical (valid almanac, RTC and two hours since last fix)
Reacquisition:	<1 s

* Depends on multipath environment, number of satellites in view, satellite geometry, and ionospheric activity

Environmental

Operating Temperature:	-30°C to +60°C (-25°F to +140°F)
Storage Temperature:	-40°C to +70°C (-40°F to +158°F)
Humidity:	MIL-STD-810 F, Method 507.4
Waterproof, Dustproof:	IP67 when installed on Archer

Mechanical

Dimensions:	101 L x 97 W x 35 H mm (4.0 L x 3.8 W x 1.4 H inches) Weight: 300 g (<10.6 oz)
Status Indication (LED):	1 LED indicating power
Antenna Connector:	SMB, female

XF101 Supported External Antenna

A20	GPS and SBAS (WAAS, EGNOS, MSAS)
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XF101 Supported Mobile GIS Software*

ESRI ArcPad 8.0	Mobile GIS software for field mapping
GNSS Driver	Extension adding the power of post-processing to ArcPad
EZTag CE™	Geospatial data acquisition software
EZField™	GNSS survey software
EZSurv	GNSS post-processing software
HGIS™	GPS mapping software
LandMark Mobile™	GPS utility software

* This list includes popular choices for Mobile GIS applications. Any unrestricted Windows Mobile application should be fully compatible with the XF101 and the Archer.

To order or request more information, contact:

Sales: sales@junipersys.com
Website: www.junipersys.com
Telephone: 435.753.1881
Fax: 435.753.1896

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