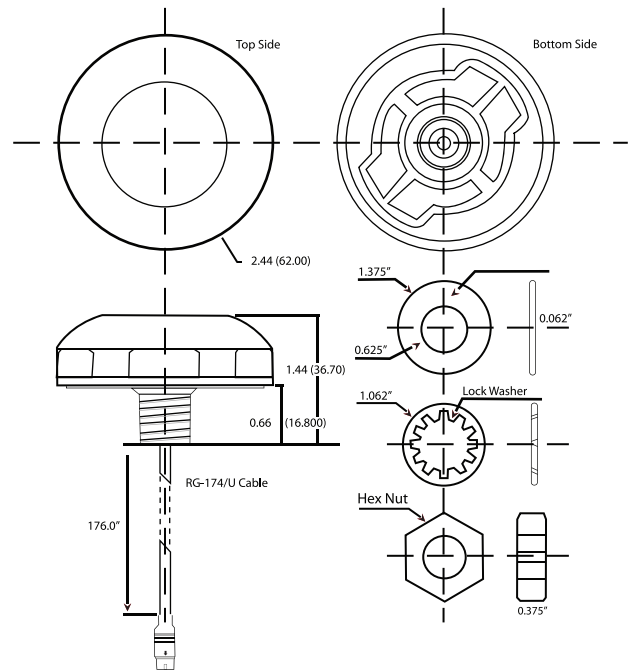


# MR-350

## GPS Receiver

- SiRF Star III Chipset
- 20-Channel All-In-View Tracking
- NMEA 0183 GPS Protocol
- WAAS/ EGNOS Support
- 2.44" x 0.82" (Exposed Housing)
- USB or RS232 Interface Cable Sets Available
- IPX7 Rated Weatherproof Design



The MR-350P is a “mini” external GPS receiver, which utilizes a bulkhead (through-hole) mounting design for applications that require a more permanent weatherproof mounting solution. The enclosed GPS receiver is self-contained with an active patch antenna and utilizes the latest 20-channel SiRF Star III high performance GPS chipset for accurate positioning.

The extended 15' cable allows for easy routing behind the headliner and side panels, terminating into a proprietary pin-out on a PS/2 connector for easy interface with your host device when using our USB or RS232 cable sets. (Cable sets are sold separately). The MR-350P can be used in a wide variety of applications including commercial fleet/utility vehicles, police and fire trucks, boats and specialty equipment.



## Serial GPS Receiver

### Performance Specifications

General.....L1 (1575.42MHz) frequency C/A code  
20 channel all-in-view-tracking receiver  
Accuracy......5 meters 2D RMS (WAAS enabled)  
10 meters, 2D RMS, (WAAS disabled)  
Acquisition.....Reacquisition: 0.1 sec. average  
hot start: 1 sec., average  
warm start: 38 sec., average  
cold start: 42 sec., average

### Protocol

PPS output.....1uS(microsecond) pulse every second at 2.85v with 3D GPS Fix  
GPS Protocol.....Default: NMEA 0183 (Secondary: SiRF binary)  
GPS Output Data.....SiRF binary >> position, velocity, altitude,  
status and control NMEA 0183 MEA0183 V2.2 protocol  
Software command setting  
GPS transfer rate.....(Default :4800,n,8,1 for NMEA )  
Connection.....Requires Optional Cable Set  
USB: #BR305-USB2  
RS232: #BR305-RS232

### Electrical Characteristics

Prime Power.....3.3V -- 5V DC Input (USB or PS/2)  
Power Consumption.....42mA

### Environmental Specifications

Operation Temperature.....-40°~ 185°F (-40°~ 85°C)  
Storage Temperature.....-49°~ 212°F (-45°~ 100°C)  
Operation Humidity.....Up to 95% relative humidity

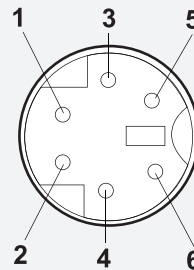
### Physical Characteristics

Enclosure.....Durable Polycarbonate  
Housing Dimensions.....2.44"x0.82" (exposed housing)  
(62mm x 21mm)  
Cable Length.....180" (terminates to PS/2)  
(4,572mm)  
Weight.....4.4oz(173.74 grams)

### Carton Specifications

Quantity Per Box.....60  
Carton Weight.....42lbs  
Carton Dimensions.....18" x 16" x 20" ( 457.2mm x 406.4mm x 508mm)

### PACKAGE CONTENTS:



PS/2 Mini DIN 6-Pin Male Connector

Color	Function	Pin
Black	GND	1
Red	VCC	2
Yellow	PPS	3
White	RX	4
Green	TX	5
-----	N/C	6

### Optional Cable Set Adapters



	<b>ADAPTERS</b>	
<b>SERIAL</b>	<b>20 CHANNEL</b>	<b>WIN</b>
	<b>SIRF III</b>	<b>MAC</b>

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MR350-DS12212011H

## Serial GPS Receiver

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10 meters, 2D RMS, (WAAS disabled)  
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### Protocol

PPS output.....1uS(microsecond) pulse every second at 2.85v with 3D GPS Fix  
GPS Protocol.....Default: NMEA 0183 (Secondary: SiRF binary)  
GPS Output Data.....SiRF binary >> position, velocity, altitude,  
status and control NMEA 0183 MEA0183 V2.2 protocol  
Software command setting  
GPS transfer rate.....(Default :4800,n,8,1 for NMEA )  
Connection.....Requires Optional Cable Set  
USB: #BR305-USB2  
RS232: #BR305-RS232

### Electrical Characteristics

Prime Power.....3.3V -- 5V DC Input (USB or PS/2)  
Power Consumption.....42mA

### Environmental Specifications

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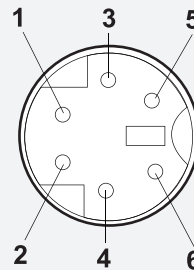
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<b>SERIAL</b>	<b>20 CHANNEL</b>	<b>WIN</b>
	<b>SIRF III</b>	<b>MAC</b>

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MR350-DS12212011H