

## MiniPod 101G, GPS receiver



The Modulus Technology MiniPod 101G is a lightweight ruggedised GPS receiver that is designed to survive 10m immersion.

The shock mounted robust dual L1 + L2 band GPS receiver has both wired and wireless applications, including providing streamer head and tail positioning and source positioning for 3D UHR seismic operations.

The interconnect flexibility of the MiniPod allows for RS232, RS485, 1PPS and wireless options to be configured. It is externally powered by default with an external battery, with internal power fail back up options available.

### Key Features

- Robust GPS receiver with integrated L1 + L2 antenna
- Submersible, 10m rated.
- Wide area corrections or external RTCM
- Internal and external shock mounts
- Atlas correction option
- Worldwide RF remote options data, RTCM
- External battery option

### Applications

- Seismic streamer head and tail positioning
- Seismic source positioning
- Ideal for subsea excavation vehicles (jetting & trenching), and surface positioning of towed sensors such as magnetometers, operating in shallow waters

## Technical Specification

### MODEL TYPE – PHYSICAL SPECIFICATION

Housing material: White Acetyl. Bracket A4 Stainless steel

	Survival Depth	Diameter	Length	Weight air/water
<b>MiniPod 101G</b>	10m	115mm	170mm	1.95kg

## MiniPod 101G specification continued...

### SPECIFICATION

#### Configuration

Receiver type:	GNSS L1 & L2, RTK with carrier phase.
GNSS compatibility:	GPS, GLONASS, BeiDou, QZSS & GALILEO
Channels:	394
SBAS tracking:	3 channel parallel tracking.
Differential Options:	SBAS, Autonomous, External RTCM, RTK, L-Band (Atlas) DGPS

#### Horizontal Accuracy (2drms – 95%) Dependent on corrections:

RTK:	8MM + 1PPM	<i>Accuracies dependent on multipath environment, number of satellites in view, geometry &amp; ionospheric conditions.</i>
WAAS:	0.3m	
Unaided:	1.2m	
Atlas H10:	0.04m	
Atlas H30:	0.15m	
Atlas H100:	0.50m	

#### Warm up time (Typical):

From cold:	<60s	(No almanac or real time clock)
Warm start:	<30s	(Almanac & RTC, no position)
Hot start	<10s	

#### Connectivity

Connector:	8 pin MCBH connector (male)
Power:	18-36VDC 24v 350mA nominal
Communication:	RS232 (2 Bi-directional Ports) RS485 (1 Bi-directional Port, 1 RTCM Receive)
Position Protocol:	NMEA 0183 protocols supported
Refresh Rate:	1Hz standard, 10Hz, 20Hz optional
Correction I/O Protocol:	Hemisphere GNSS proprietary, ROX Format, RTCM v2.3, RTCM v3.2, CMR, CMR+
IPPS	5V, 1ms pulse width, 20mA optional

### OPTIONS

100m or 1500m RF Modem with optional external antenna  
Internal power fail battery back up  
External battery



Due to continual product improvement, specification information may be subject to change without notice.  
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