

107GS

MiniPod, Satellite Relocation Device



Key features

- Remote tracking
- Global satellite connectivity, utilising the IsatData Pro service
- Submersible, 3000m rated
- Multi GNSS receiver
- Internal shock mounts, satellite modem MIL-STD rated
- Ruggedised for harsh environments

Applications

- Remote asset monitoring
- Relocation of subsea assets, AUV, ROV, cable plough
- Ocean AUV surface GNSS positioning
- Satellite modem

107GS MiniPod Overview

The 107GS MiniPod is a shock-mounted and ruggedised satellite transceiver / GNSS receiver that is designed to survive 3000m immersion for relocation and positioning of subsea assets at the sea surface.

The 107GS MiniPod automatically switches on at the sea surface to acquire satellite positions. This GNSS lock minimises cold start times to provide auto tracking.

The 107GS MiniPod is externally powered by a rechargeable battery pack.

Technical Specification

MODEL TYPES – PHYSICAL SPECIFICATION

Housing material: 107GS, titanium body with glass hemisphere. Battery, BPK-107G-R, aluminium body.

	Part Number	Survival Depth	Diameter	Length	Weight air/water
107GS MiniPod Satellite transceiver/ GNSS receiver	BCN-107GS	3000m	203mm	285mm	14kg/6.5kg
Battery	BPK-107GS-R	3000m	125mm	600mm	16kg/12kg

SATELLITE COMMUNICATION

Satellite service	IsatData Pro
Elevation angle	-5° to +90°

GNSS CONFIGURATION

Receiver type	GNSS Multi-frequency
GNSS compatibility	GPS, GLONASS, BeiDou, QZSS & GALILEO
Real time tracking	Pole Star. Online registration and subscription services

HORIZONTAL ACCURACY

GPS	2.5 –2.0m
GLONASS	4.0m
BeiDou	3.0m
GPS + GLONASS	2.5-2.0m
GPS + BeiDou	2.5-2.0m

Accuracies dependent on multipath environment, number of satellites in view, geometry & ionospheric conditions.

All satellites at -130dBm.

Circular Error Probable (CEP), 50%, 25 hours Static @ -130dBm

CONNECTIVITY

Connector	8 pin MCBH connector (male)
Power	12-36VDC 18V nominal



OPERATION

Warm up time (Typical)	From cold: <60s Hot start: <10s
Automatic switch on	Factory set to operate at <15 psi water pressure
Operational life	From fully charged BPK-107G-R battery: Receiver life: GNSS + Satellite, 10 days continuous Transmit life: 70 hours continuous updates

BATTERY, PART NUMBER, BPK-107GS-R

Battery type	NiMH rechargeable
Capacity	21Ah at 20°C fully charged
Voltage	16.8V nominal, 21V charged
Fast charger type	Applied Acoustics' 1083 Multi-Charger. Part number CHA-1083
Trickle charge	22-35V 120mA
Connection	8 pin MCBH connector (female)
Interconnect cable	Length, 5m standard. Part number, BPK-107GS-4000