

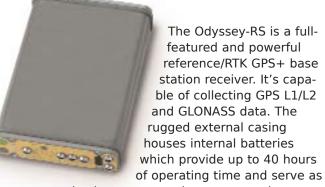






# ODYSSEY-RS

Integrated GPS+ Receiver



a power back-up system when connected to an external 12V power source. The Odyssey-RS includes many advanced features that are optional on other receivers such as:

- 100 percent compatible with all existing upgrade options, including dual-frequency
- USB and Ethernet communication support
- Easiest, most powerful RTK solution available

At its core is our **Paradigm** chip featuring 40 universal super channels that can each track all signals of either L1 or L2 GPS frequencies.

It incorporates out new innovations in signal processing,

multi-path mitigation and co-op tracking, making Topcon GPS+ the best in the for under-canopy and low signal strength reception.

Along with the capability of continuous operation as a permanent Reference Station, the Odyssey-RS

has many advanced features, such as:

- Full wave carrier even under Anti-Spoofing activation
- Real-Time data streaming for Network Operation
- Over Voltage and Reverse Polarity protection
- Retruns to last configuration should power be interrupted

Combined with a Topcon CR-3 choke ring antenna, Odyssey-RS provides maximum performance for all RTK

base and reference station collection with excellent multipath rejection performance and environmental

radome cover. Or you can choose the more lightweight, accurate, precision micro center design of the PG-A1 antenna.

Topcon GPS+—no ordinary GPS.





TOPCON POSITIONING SYSTEMS, INC. 800-443-4567 www.topcon.com

## Odyssey-RS Technical Data<sup>1</sup>

#### Description

#### **Tracking Specifications**

Tracking Channels, standard Tracking Channels, optional

Signals Tracked

#### Performance Specifications

Static, Rapid Static

RTK

#### **Power Specifications**

Battery Internal External power input Power consumption

Communication Ports Other I/O Signals Status Indicator

#### Memory & Recording

Internal Memory Raw Data Recording Data Type

#### **Data Output**

Real time data outputs **ASCII Output** Other Outputs Output Rate

#### **Environmental Specifications**

Enclosure Operating Temperature Storage Temperature Dimensions

Weight

40 channel integrated GPS+ receiver with MINTER interface

40 L1 GPS (20 GPS L1+L2+GLONASS on Cinderella 2 days) 20 GPS L1+L2 (GD), 20 GPS L1 + GLONASS (GG),

20 GPS L1+L2+GLONASS (GGD) L1/L2 C/A and P Code & Carrier

Horizontal: 3mm+ 0.5ppm (x baseline length) Vertical: 5mm+ 0.5ppm (x baseline length)

Horizontal: 10mm+ 1.0ppm Vertical: 15mm+ 1.0ppm

Lithium-lon batteries plus 1 x external power port 6 to 28 volts DC Less than 3.7 watts

4x serial (RS232) (2x standard) 1pps, Event Marker - optional

2x3-color LED's, two-function keys (MINTER)

Up to 6 Gbyte

Up to 20 times per second (20Hz)

Code and Carrier from L1 and L2, GPS and GLONASS

RTCM SC104 version 2.3 CMR2/CMR+

NMEA 0183 version 3.0

TPS format

Up to 20 times per second (20Hz)

Aluminum extrusion, waterproof -40°C to 60°C / -40°F to 140°F -40°C to 60°C / -40°F to 140°F

W:159 x H:242 x D:49 mm / 6.25 x 9.53 x 1.93 in

1.9 kg / 4.19 lbs

#### Standard Configuration

- Odyssev-RS Receiver (0Mb)
- Cinderella GPS/GLONASS L2 activation
- 1 Hz Update Rate
- · Co-op Tracking
- NMEA 0183 output
- User Defined Outputs
- MINTER Interface
- · Advanced Multipath Reduction
- 2x RS232 Serial Ports
- Ethernet port
- USB Port
- 1x External Power Port
- Met / Tilt Sensor inputs
- Power Cables
- RS232 Cable
- USB Cable
- RAIM

### **Optional Features**

- GPS/GLONASS L1/L2 • Update rate 5Hz, 10Hz & 20Hz
- RTK @ 5Hz. 10Hz & 20Hz
- · Data Recording 4Mb to 6Gb
- CMR/RTCM input/output
- In-Band Interference Rejection
- Frequency I/O
- · Event Marker
- · 2 additional serial ports
- Additional power port
- 1 PPS and Programmable Timing
- Signals
- WAAS

### Optional Antenna

- PG-A1 with ground plane
- CR-3

• PG-A1

- CR-4
- Optional Radomes

Topcon sells GPS products into the precision markets only. Go to www.topcongps.com for details.

1 Specifications are subject to change without notice. Performance specifications assume a minimum of 6 GPS or 7 GPS/GLONASS satellites above 15 degrees in elevation and adherence to procedures recommended by TPS in the appropriate manuals. In areas of high multipath, during periods of high PDOP and during periods of high lonospheric activity performance may be degraded. Robust checking procedures are highly recommended in areas of extreme multipath or under dense foliage.

2 Cinderella feature activates GPS L2 and GLONASS reception at GPS midnight every other Tuesday for 24 hours.

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