

GPR32 DGPS REFERENCE STATION

Generates corrections in DGPS systems with high accuracy, even in an environment which is adverse regarding the multipath propagation of signal.

The DGPS corrections are put out either on the communication line in the RTCM SC-104 format or may be transmitted through the voice channel of the transceiver via a built-in modem. The transceiver may be operated manually, remotely on-line or remotely via a radio channel.

The transmission of corrections may be triggered by a radio request as well. It may also be used for positioning. In this mode, the transceiver is able to accept DGPS corrections generated by another reference station.

The built-in modem features reception of text messages, reception of reference points parameters for database filing, and the rebroadcast of data from other stations. With a PC connected, it is possible to send text messages, receive vehicle position reports, send position reporting requests, and to remotely file the waypoints database. GPR32 also features working with reference points database, archives generated corrections or measured positions, during stationary measurement averages positions, and offers a wide range of operating data.



TECHNICAL SPECIFICATIONS

Geodetic datum	WGS 84 or S-42
Position co-ordinates formats	latitude and longitude or planimetric coordinates
DGPS accuracy	better than 5.0 m (95 %) - GPR32/GPR22A better than 1.5 m (95 %) - GPR32/GPR32
Position update rate	1 second
Time to first fix	typically 70 s (cold start)
Waypoints database capacity	256 points, extendable up to 2084 points
Archive memory size	1 MB, extendable to 4 MB
Interface	2 serial bidirectional ports RS232C, 9 600 bps
DGPS corrections input/output	according to RTCM SC-104

Radio communication	FFSK 1200 bps modem
Power supply	from RF13.1, RF13.11 battery packs or from board mains 10.5 V to 33 V
Power consumption	max. 15 W
Operating temperature range	-30 °C to +60 °C -30 °C to -20 °C when the display function is not required
Dimensions	203.5 mm x 82.5 mm x 173.5 mm
Weight	1.9 kg

SATELLITE NAVIGATION RECEIVER GPR22A



- is tailored to operation in DGPS mode.

It features positioning, speed and precise time determination and solving of navigational tasks. The data are not only displayed but also accessible via a communication line.

The communication module features the reception of DGPS corrections transmitted via the voice channel of the transceiver or via the RDS system. It also includes transmitting of vehicle position reports, emergency calling, reception and database filing of waypoints' parameters, reception of text messages, archiving of the recorded position data, averaging during stationary measurement, and it also provides a wide range of operational data.

TECHNICAL SPECIFICATIONS

Geodetic system	WGS 84 or S-42
Position coordinates formats	latitude and longitude or planimetric coordinates
Accuracy (SA on)	better than 100 m (95 %), typically 70 m (95 %) at 30 min averaging typically 25 m (95 %) in DGPS mode better than 5 m (95 %)
Position update rate	1 second
Time to first fix	max. 2 min, typically 45 seconds
Waypoints database capacity	100 points, extendable up to 484 points
Archive memory size	4 hours of 1 s recordings or 240 hours of 1 minute recordings
Interface	1 serial bidirectional and 1 receive-only ports RS232C, 9 600 bps
DGPS corrections input	according to RTCM SC-104
Radio communication	FFSK 1200 bps modem RDS receiver 87.5 MHz to 108 MHz, 1187.5 bps

Power supply	from RF13.1, RF13.11 battery packs or from board mains 10.8 V to 33 V
Power consumption	max. 4.5 W (voltage 10.8 V to 15 V) max. 9.0 W (voltage 15 V to 33 V)
Operating temperature range	-30 °C up to +60 °C -30 °C to -20 °C when the display function is not required
Dimensions	203.5 mm x 82.5 mm x 173.5 mm
Weight	2.0 kg



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