

G4 GPS EPIRB Technical Specification

General

Approved to	COSPAS-SARSAT T.001 class 2 RTCM SC110-STD Version 2 class 2 ETS 300 066 IEC 1097-2
Complies with	EN 60945 Part 80 of FCC regulations
Operating temperature range	-20°C to +55°C
Storage temperature range	-30°C to +70°C
Operational life	48 hours minimum at -20°C
Battery type	9V lithium manganese dioxide
Battery expiry	6 years from date of manufacture

Electrical

406.025MHz transmitter

Frequency	406.028MHz \pm 3KHz
Output power	5W \pm 2dB
Data encoding	Bi-phase L
Modulation	Phase modulation: 1.1 rads \pm 0.1 rads
Transmission time	520ms \pm 1%
Repetition period	50 secs \pm 2.5 secs

121.5MHz homing transmitter

Frequency	121.5MHz \pm 3KHz
Output power	50mW \pm 3dB PERP
Transmit duty cycle	Continuous
Modulation format	3K20A3X
Modulation frequency sweep	1300Hz to 350Hz
Modulation duty cycle	41% \pm 5%
Sweep repetition rate	3Hz \pm 1Hz
Sweep direction	Programmable UP or DOWN

GPS receiver/engine

Centre frequency	Band L1. 1.57542GHz
Received signal sensitivity	-175dBW minimum.
Maximum number of satellites tracked	12

Transmit Antenna

Type	Flexible, vertical whip
Characteristics	Vertically polarised, omni-directional

Receive Antenna

Type

Ceramic dielectric patch

Characteristics

Right hand circular polarised. Nominal +3dBi gain.

Optical Homer

Type

Xenon discharge tube

Flash rate

20 to 23 flashes per minute

Light output

> 0.75 candela over 75% of the horizontal plane

External Interfaces

Programming interface

Infra-red link via RS232 port on a PC.

Manual activation

Sealed membrane switch. Protected by sliding cover.

Automatic activation

Sea water switch contacts. Activation within 5 seconds of immersion.

Self test

Sealed membrane switch. Press and hold to activate self test. Confirmation of successful self test by 3 flashes of strobe light.

Physical characteristics

Weight

730 grams nominal

Height

210mm to base of antenna.

Width

110.5mm at maximum