E3/ Rescue 406 EPIRB Technical Specification

General

Approved to COSPAS-SARSAT T.001 class1

RTCM SC110-STD Version 2 class 1

ETS 300 066 IEC 1097-2

Complies with EN 60945

Part 80 of FCC regulations

Operating temperature range -40°C to +55°C Storage temperature range -50°C to +70°C

Operational life 48 hours minimum at -40°C
Battery type 9V lithium sulphur dioxide
Battery expiry 6 years from date of manufacture

Electrical

406.025MHz transmitter

Frequency $406.025 \text{MHz} \pm 5 \text{KHz}$

Output power $5W \pm 2dB$ Data encoding Bi-phase L

Modulation Phase modulation: 1.1 rads \pm 0.1 rads

Transmission time $440 \text{ms} \pm 1\%$ Repetition period $50 \text{ secs} \pm 2.5 \text{ secs}$

121.5MHz homing transmitter

Frequency $121.5 \text{MHz} \pm 3 \text{KHz}$ Output power $50 \text{mW} \pm 3 \text{dB PERP}$

Transmit duty cycle Continuous Modulation format 3K20A3X

Modulation frequency sweep 1300Hz to 350Hz

Modulation duty cycle $38\% \pm 5\%$ Sweep repetition rate 3Hz + 1Hz

Sweep direction Programmable UP or DOWN

Antenna

Type Flexible, vertical whip

Characteristics Vertically polarised, omni-directional

Optical Homer

Type Xenon discharge tube Flash rate 20 to 23 flashes per minute Light output > 0.75 candela over $\ge 75\%$ of the

horizontal plane

External Interfaces

Programming interface Manual activation Infra-red link via RS232 port on a PC. 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