

500-32 Series Survival ELT 406MHz



PLB 500-32 SERIES
OPERATING
INSTRUCTIONS

BEACON: Press & hold 'ON' for 2 seconds.

ACTIVATE: Press & hold 'ON' with 2 seconds.

TEST: Press & hold 'Test' for 3 seconds.

USE TO IN FUNCTIONS ONLY WHEN RESCUE CRAFT IS SEEN OR HEARD.

Techtest Ltd, Leominster, England.

PLB 500-32 series
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INSTRUCTIONS

TEST : Press 'TEST'.

TEST GPS: Press 'TEST', Press 'GPS' within 5 secs.

ACTIVATE: Extend Antenna fully. Slide Red Safety Tag. Press 'ON'.

DE-ACTIVATE: Press 'OFF'.

Techtest Ltd, Leominster, England.

500-32 Series Survival ELT 406MHz

- Compliant with RTCA DO-227A/TSO-C142b
- COSPAS-SARSAT Class 2
- Beacon only and speech mode variant
- Eurocae ED-62A
- Waterproof to 10 meters (non buoyant)
- Reprogrammable on aircraft
- Low weight and small size
- Simple self-test function
- Antenna options available

One of the smallest and lightest survival ELTs on the market today, the 500-32 series is ideally suited for use on both fixed and rotary wing aircraft. In emergency use the beacon activation is simple, either using the manual activate button or automatically via the lanyard activation. Various antenna options facilitate the beacons use with pilot life vests, life rafts or stowage on commercial aircraft.

The beacons are fully compliant with the COSPAS-SARSAT 406MHz satellite system, featuring embedded GPS for enhanced location accuracy. The 121.5MHz enables SAR homing/DF and optional 2-way speech when the SAR aircraft is in visual range.

The unit is rugged with a 20 year life; the only maintenance being battery replacement every 7 years. Designed to meet the FAA Special Conditions and DO-227A for use of lithium batteries on aircraft.

Operator programming or re-programming can be provided via the programming kit.

Specification

Modulation (121.5MHz)

Continuous Swept Tone at least 700Hz within Sweep Range (ITU A3X).

Sweep Range 1.6KHz to 300Hz (i.e. downwards)

Sweep Rate 2-3Hz

Amplitude Modulated with Rectangular Wave

Modulation Depth - 67% minimum (80% typical)

Speech ITU A3E

Modulation (406MHz)

0.5 Secs 5W pulse every 50 secs (ITU G1D)

Phase modulation of $\pm \pi/3$ rad (peak)

Digital modulation (see C/S G.005 Iss. 2 Rev 1, Section 3) to include:

- Bit Synchronisation
- Frame Synchronisation
- Protected Field
- Emergency-Code/National Use Field
- Long Message

GPS Receiver (Embedded)

- Sat. Signal Reacquisition Time 100ms
- Number of Channels 12
- Cold Start (avg) <39 sec
- Receiver L1 C/A Code

Power Output

406MHz >24 hours 5W (+37dBm \pm 2dB)

121.5MHz >48 hours 100mW (+20dBm \pm 3dB)

Mechanical

Activation Manual, Lanyard (only on 500-32-2Y-H and 500-32-2Y-HF)

Dimensions 160.7mm x 71mm x 50mm nominal

Weight <530g nominal

Colour Yellow

The unit is designed to survive for up to twenty years with the only maintenance being battery replacement every five years.

Compliance

The PLB is compliant with the following specifications:

Civil EUROCAE ED62A / RTCA DO-227A
RTCA DO-160G / COSPAS-SARSAT

Approvals

Cospas-Sarsat approval pending

ETSO C-126b Pending

ETSO C-142b Pending

Part Numbers

500-32-2Y-G Beacon without speech

500-32-2Y-GF as above with retrieval float

500-32-2Y-H Beacon with speech

500-32-2Y-HF as above with retrieval float

A0 2787 Battery pack

A0 2788 Mounting bracket

A0 2788-E Mounting bracket (for beacon with float)