503 Series of Deployable Beacon

with built-in GPS and FDR memory module

Crash Position Indicator
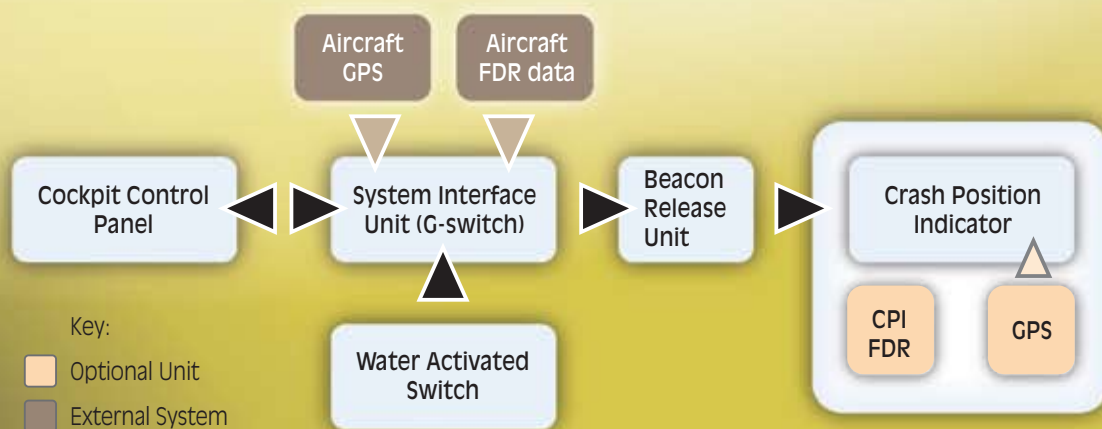## 503 Series of Deployable Beacon

- ➤ Fixed and rotary wing operation
- ➤ Built-in GPS option
- ➤ Multi-axis G-Switch operation
- ➤ Solid state activation devices eliminates rogue operation
- ➤ On aircraft programming for Cospas/Sarsat aircraft protocols
- ➤ Flight Data Recorder (FDR) memory option
- ➤ GPS transmission of lat long data on 406MHz message
- ➤ Maintenance lock-out for safe hangar environment
- ➤ Modular construction

The need to accurately pinpoint downed aircraft through the use of a Crash Position Indicator (CPI) or Automatically Deployable Beacon (ADELT) has always existed. The increasing use of Cospas/Sarsat and Global Positioning System (GPS) has highlighted the need for a CPI which has expanded capabilities. The Techtest 503 Series of CPI includes full Cospas/Sarsat coverage together with the inclusion of transmission of last known GPS co-ordinates on the satellite 406MHz long message.

Features include on aircraft programming of Cospas/Sarsat protocols allowing easy removal and replacement of the CPI beacon, whereby the replacement CPI is automatically programmed with the existing aircraft protocol.

Modular design of the system allows for ease of maintenance and multi-axis solid state G-Switch technology ensures reliable operation against CAA Specification 16.

Specification

Transmitter Signal

Frequency	121.5MHz / 406.025MHz
Peak Effective Radiated Power	75mW at 121.5MHz 5.0W at 406.025MHz
Frequency Stability	2×10^{-9} per min
Transmission Duration	24 Hrs min, 5W PERP at -20°C 48 Hrs min, 75mW PERP at -20°C
Repetition Rate	520ms (±1%) every 50 secs (±5%)

Activation

Manual	The 503 Series of CPI can be manually operated via the cockpit control panel.
Automatic	The CPI can be reliably activated by the multi-axis G-Switch or together with the on-board water activated switch.

Compliance

The 503 Series of CPIs are compliant with the following specifications:

➤ COSPAS/SARSAT specification C/ST.001

➤ EUROCAE ED-62/RTCA DO-204/RTCA DO-183

➤ EUROCAE ED-14C/RTCA DO-160C

➤ CAA Specification No 16, Issue 2

Dimensions, Weight and Battery Storage Life

CPI Beacon Part No. 503-16 Part No. 503-16GPS Part No. 503-16MM	305mm x 92mm 12 ins x 3.62 ins
Cockpit Control Panel Part No. 503-22 Series	146.2mm x 38mm x 66mm 5.75 ins x 1.5 ins x 2.6 ins
Beacon Release Unit Part No. 503-21	140mm x 70mm x 67mm 5.5 ins x 2.76 ins x 2.64 ins
System Interface Unit Part No. 503-24 Series Part No. 503-42 Series	217mm x 120mm x 82mm 8.5 ins x 4.7 ins x 3.2 ins
Water Activated Switch Part No. 503-23-2	140mm x 59mm x 31mm 5.5 ins x 2.3 ins x 1.2 ins
Aircraft Ident Config. Unit Part No. 503-40	150mm x 66mm x 40mm 5.9 ins x 2.6 ins x 1.57 ins
System weight	4kg nominal
Battery Storage Life	5 years

Approvals

➤ TSO C91a, JTSO-2C91a, TSO C126 and JTSO-2C126

➤ CAA WRO1029

➤ COSPAS/SARSAT compatible

Accessories

Part No. A0936	Transmitter Battery
Part No. AO1011	System Interface Unit Battery

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