

503 Series of Deployable Beacon with built-in GPS and FDR memory module



Crash Position Indicator

503-16 Series CPI Beacon with Memory Module

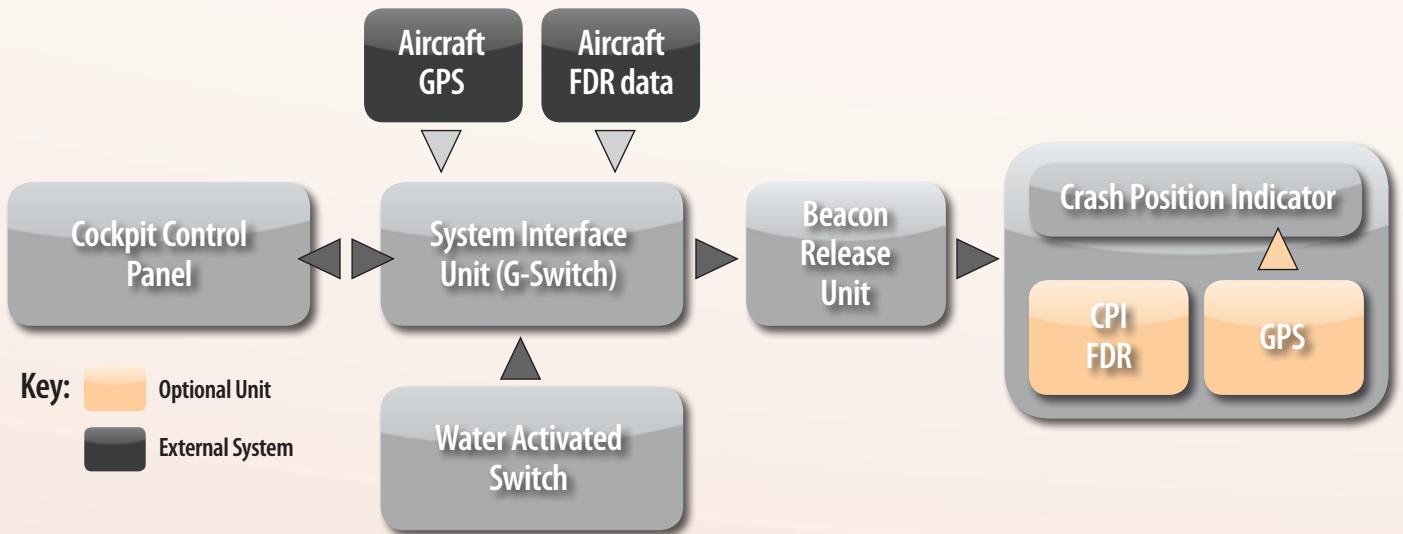
- Fixed and rotary wing operation
- Built-in GPS option
- Multi-axis G-Switch operation
- Solid state activation devices eliminates rogue operation
- On aircraft programming for Cospas/Sarsat aircraft protocols
- Flight Data Recorder (FDR) memory option
- GPS transmission of lat long data on 406 MHz 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 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.

The 503-16 Series CPI Beacon can now be supplied with an FDR or HUMS Memory Module. The Beacon is directly interchangeable with existing units and will provide the operator with the additional features displayed overleaf.



Specification

Additional Features

- Ability to download data at the aircraft through remote connector
- Ethernet recorder interface
- Records ARINC 573/717 Bi-Phase data
- Records FDR or HUMS data frame
- Automatic input data rate detection
- Memory: 500mb NAND
- Built in self test
- Fault condition output
- Data encryption
- Recording rates:

1,200 hrs @ 64wps	151 hrs @ 512wps
600 hrs @ 128wps	75 hrs @ 1024 wps
303 hrs @ 256 wps	

Ground Support Equipment

HHMPI for data download
(can also download from most fixed FDR's)
STARS software for data replay

Transmitter Signal

Frequency	121.5MHz/243MHz*/406.025MHz
Peak Effective Radiated Power	75mW at 121.5MHz 5.0W at 406.025MHz
Frequency Stability	2 x 10 ⁻⁹ per min
Transmission Duration	24Hrs min, 5W PERP at -40°C 48Hrs min, 75mW PERP at -40°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

*optional

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 No16, Issue 2

Dimensions, Weight and Battery Storage Life

CPI Beacon

Part No. 503-16	305mm x 92mm
Part No. 503-16GPS	(12 ins x 3.62 ins)
Part No. 503-16MM	
Part No. 503-16MMGPS	
Part No. 503-16MMGPS-243	

Battery Storage Life 5 years

Cockpit Control Panel 146.2mm x 38mm x 66mm
Part No. 503-22 Series (5.75ins x 1.5ins x 2.6ins)

Beacon Release Unit 140mm x 70mm x 67mm
Part No. 503-21 (5.5ins x 2.76ins x 2.64ins)
Part No. 503-21-1 (with integrated water activated switch)

System Interface Unit 217mm x 120mm x 82mm
Part No. 503-24 Series (8.5ins x 4.7ins x 3.2ins)
Part No. 503-42 Series

Water Activated Switch 140mm x 59mm x 31mm
Part No. 503-23-2 (5.5ins x 2.6ins x 1.2ins)

Beacon Deployment Control
Part No. 503-41 140mm x 55mm x 89mm
(5.5ins x 2.17ins x 3.5ins)

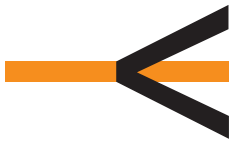
Aircraft Ident Config. Unit 150mm x 66mm x 40mm
Part No. 503-40 (5.9ins x 2.6ins x 1.57ins)

System weight 4kg nominal

Approvals

TSO C91a, JTSO-2C91a, TSO C126 and JTSO-2C126
CAA WR01029
COSPAS/SARSAT Approval 244

Accessories (For full range please contact Techtest Limited)
System Interface Unit Battery - Part No. A01011



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