

AVIATION ELT 406 MHz Tester Series | Maritec Trust



ELT-406-02/03



ELT-406-03-MW (Mini-WiFi)

OVERVIEW

The ELT-406 Tester series is designed to test multi band aviation Emergency Locator Transmitters (ELT) operating on the COSPAS-SARSAT system.

The following models are available in the ELT-406 Tester series.

Model	Frequencies (MHz)	Compliance
ELT-406-02	406, 121.5	CAA / EuroCAE (Europe)
ELT-406-03	406, 243, 121.5	CAA / EuroCAE (Europe)
ELT-406-03-E	406, 243, 121.5	FAA Part 91.207 (USA), CAR 571 Appendix G (Canada) and CAA / EuroCAE (Europe)
ELT-406-03-MW	406, 243, 121.5	FAA Part 91.207 (USA), CAR 571 Appendix G (Canada) and CAA / EuroCAE (Europe)

The ELT-406 Tester series is designed in accordance with international requirements.

The ELT-406 Tester series is specialised service equipment used in the aviation industry by aircraft surveyors, ELT manufacturers and suppliers, classification societies and authorities.

The ELT-406 Tester series can receive messages from any 406 MHz COSPAS-SARSAT beacon, either in test or emergency mode.

The ELT-406 Tester series can perform both radiated (antenna, distance 3 to 15 meters) and conducted (attenuator) tests. Tests should be performed in accordance with the ELT manufacturer's instructions.

AVIATION ELT 406 MHz Tester Series | Maritec Trust

The following data is measured and displayed.

- ◆ Decoded 15 hexadecimal message or message data bits (1 -112)
all available parameters are displayed
- ◆ Frequency measurements
- ◆ Transmission power measurement
- ◆ Calculated BCH code and received BCH code

The ELT-406 Tester series can be used for testing other COSPAS-SARSAT emergency beacons such as marine Emergency Position Indicating Radio Beacons (EPIRB) and Personal Locator Beacons (PLB).

ELT-406 Tester series is compatible with Galileo Search and Rescue System.

PRODUCT FEATURES

- ◆ Hand held unit
- ◆ LCD with back light display (refer to Note 1)
- ◆ Keypad, menu driven (refer to Note 1)
- ◆ Supports all ELT aviation protocols
- ◆ Complies with International requirements
- ◆ Ten (10) test sessions can be stored, data displayed on LCD and downloaded to PC
- ◆ WiFi connection (refer to Note 2)
- ◆ Connect to WiFi devices with browser support such as smart phones, tablets, etc.
(refer to Note 2)
- ◆ Easy connection to PC, laptop, notebook for processing of downloaded data
- ◆ User friendly Windows application available
- ◆ Power: Internal batteries, easy to replace (4 x AA, 1.5V, ± 6 hour operational period) or external PSU 4.5V/7V 300mA or when connected to computer via USB cable (refer to Note 1)
- ◆ Easy recalibration, return to factory not required
- ◆ One (1) year warranty

Note 1. NOT applicable to ELT-406-03-MW.

Note 2. ONLY applicable to ELT-406-03-MW.

AVIATION ELT 406 MHz Tester Series | Maritec Trust

TECHNICAL FEATURES

- ◆ Demodulation and decoding of emergency data transmitted on 406 MHz
- ◆ Position data encoding (when available) in degrees, minutes and seconds
- ◆ Frequency measurement on 406MHz, accuracy $\pm 500\text{Hz}$
- ◆ Frequency measurement on 121,5 MHz, accuracy $\pm 300\text{Hz}$
- ◆ Frequency measurement on 243 MHz, accuracy $\pm 300\text{Hz}$
- ◆ Radiated power measurement on 406 MHz, range 19dBm to 43dBm, accuracy $\pm 0.5\text{dB}$
(-34dBm to -10dBm $\pm 2\text{dB}$)
- ◆ Radiated power measurement on 121.5 MHz, range 13dBm to 20dBm, accuracy $\pm 0.5\text{dB}$
(-40dBm to -34dBm $\pm 2\text{dB}$)
- ◆ Radiated power measurement on 243 MHz, range 13dBm to 20dBm, accuracy $\pm 0.5\text{dB}$
(-40dBm to -34dBm $\pm 2\text{dB}$)
- ◆ Estimation of the positive/negative phase deviation of modulated signal, accuracy $\pm 2.8^\circ$
- ◆ Measure of total transmission time on 406 MHz, accuracy $\pm 0,2\%$
- ◆ Measure unmodulated carrier period on 406 MHz, accuracy $\pm 0,2\%$
- ◆ Estimate radiated power on 406 MHz

INCLUDED IN TEST SET ELT-406-02 AND ELT-406-03

- ◆ ELT-406-0X Tester
- ◆ Antenna
- ◆ USB cable 1.5m (USB-A to USB-A)
- ◆ RF RG58 cable 0.5m (TNC/TNC)
- ◆ RF RG58 cable 1m (BNC/TNC)
- ◆ 4 AA batteries
- ◆ Technical description and operation manual (English)
- ◆ Software and software user's manual (download from website)
- ◆ Calibration Certificate

Optional

- ◆ Attenuator
- ◆ RF RG58 cable 0.5m (TNC/TNC)
- ◆ RF RG58 cable 1m (TNC/BNC)

AVIATION ELT 406 MHz Tester Series | Maritec Trust

INCLUDED IN TEST SET ELT-406-03-E

- ◆ ELT-406-03-E Tester
- ◆ Antenna
- ◆ USB cable 1.5m (USB-A to USB-A)
- ◆ 4 AA batteries
- ◆ Technical description and operation manual (English)
- ◆ Software and software user's manual (download from website)
- ◆ Calibration Certificate
- ◆ Attenuator
- ◆ RF RG58 cable 0.5m (TNC/TNC)
- ◆ RF RG58 cable 1m (TNC/BNC)

INCLUDED IN TEST SET ELT-406-03-MW

- ◆ ELT-406-03-MW
- ◆ Antenna
- ◆ Batteries
- ◆ Technical description and operation manual (English)
- ◆ Software and software user's manual (download from website)
- ◆ Calibration Certificate
- ◆ Attenuator
- ◆ RF RG58 cable 0.5m (TNC/TNC)
- ◆ RF RG58 cable 1m (TNC/BNC)

Specifications may change without prior notice.