

# BEACON Tester

The BEACON Tester is designed for check the Emergency Radio Beacons according to the SOLAS requirements 74 - 48, the IMO resolutions A.695(17) and A.810(19), the COSPAS/SARSAT procedures T.007 and the Russian Marine Register rules. The check is carried out in the shielded rooms such as the conning bridge, the hold etc with the 6x6x2,5 m overall dimensions

According to requirements of Maritime Administrations, there is a necessity to check the EPIRB after receiving of the type approval. BEACON Tester allows to perform tests and check the EPIRB's efficiency. The measurement problems connected with complexity of the basic signal parameters are successfully solved by BEACON Tester.



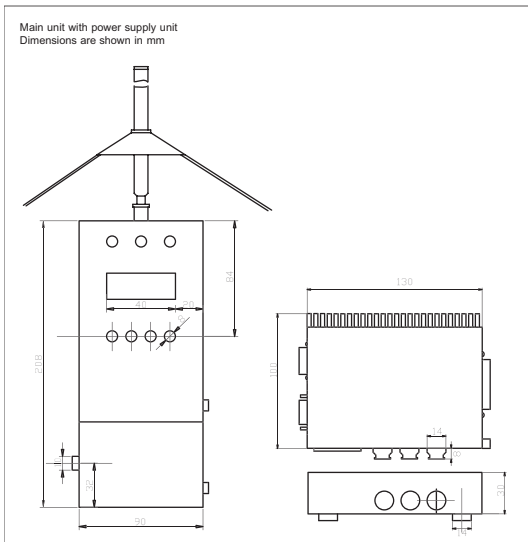
All parameters can be checked automatically or the hand-picked parameter can be checked individually. The device is supplied with power supply unit. The measurements are carried out by means of BEACON's contact cutoff point or through the broadcast.

The Beacon Tester has user-friendly software, designed to guide the operator through the test procedures.

Messages are stored, and can be viewed on the internal LCD display. Alternatively, by using the Printer, data can be printed. The printer is not included in the standard delivery set and has to be ordered additionally.

BEACON Tester has been specifically designed to work with EPIRBs from any manufacturer.  
**BEACON Tester is handheld now**





#### The Tester allows to:

- check the frequency carrier - 406 MHz;
- check the presence of the frequency carrier - 121,5 MHz;
- measure the values of positive and negative phase of modulated signal;
- the duration of the message on frequency 406 MHz;
- evaluate the duration of unmodulated preamble on frequency 406 MHz;
- measure the signal power on frequency 406 MHz;
- measure the signal power on frequency 121,5 MHz;
- check the presence of the sweep-tone;
- decode the received emergency information on the 406 channel MHz for all types of the protocols appropriate to the Recommendations C/S T-001;
- print the protocol of BEACON's check;
- check BEACON's parameters as through a connector (with use of an artificial), as through broadcast by antenna.

The device is designed for operation at temperature range + 5 C up to + 45 C with relative humidity of air up to 95%. The device is supplied by 24 V onboard power circuit (with usage of the supply unit) or by built-in battery.

The device makes indication of a signal's power level on frequency 406 MHz in a range 1,6-7W accurate within  $\pm 2,5$  db.

The device makes indication of a signal's power level on frequency 121,5 MHz in a range 10-55 mW accurate within  $\pm 2,5$  db.

#### Basic parameters

- Resistance of artificial antenna is 50 Ohms  $\pm 1,5$  Ohms.
- Standing-wave ratio of artificial antenna on frequency 406 MHz J 1,15.
- Voltage damping factor (VDF) of an artificial antenna :
  - on frequency 406 Mhz VDF = -38db $\pm 1,5$  dB;
  - on frequency 121,5 Mhz VDF = - 54db $\pm 5$ db
- Standing-wave ratio of antenna:
  - on frequency 406 MHz < 1,1
  - on frequency 121,5 MHz < 1,6

#### The set of the device includes:

- Main unit
- Antenna
- Artificial
- Power supply unit
- The printer (Not included to the standard delivery set)

#### Characteristics

- The device allows to make measurements in an automatic mode (measurement of all parameters during one message) and individually (each parameter during one message).
- The device allows saving in non-volatile memory 10 blocks of the measured parameters.
- Time of one cycle of measurement is no more than 2 minutes.
- The current consumed by a supply unit from 24V circuit is:
  - no more than 0,5 A - without the printer
  - no more than 1,4 A - with the operating printer.
- The onboard power circuit voltage should be 24 V + 1V - 4 V
- Operational life of the device supplied by the battery unit is not less than 6 hours.
- The device provides recharge of a battery unit through a supply unit. The maximum time of recharge is no more than 16 hours.
- The device provides automatic stop after completion of the recharge.
- The device displays voltage of a battery unit accurate within  $\pm 5\%$ .

Available from

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