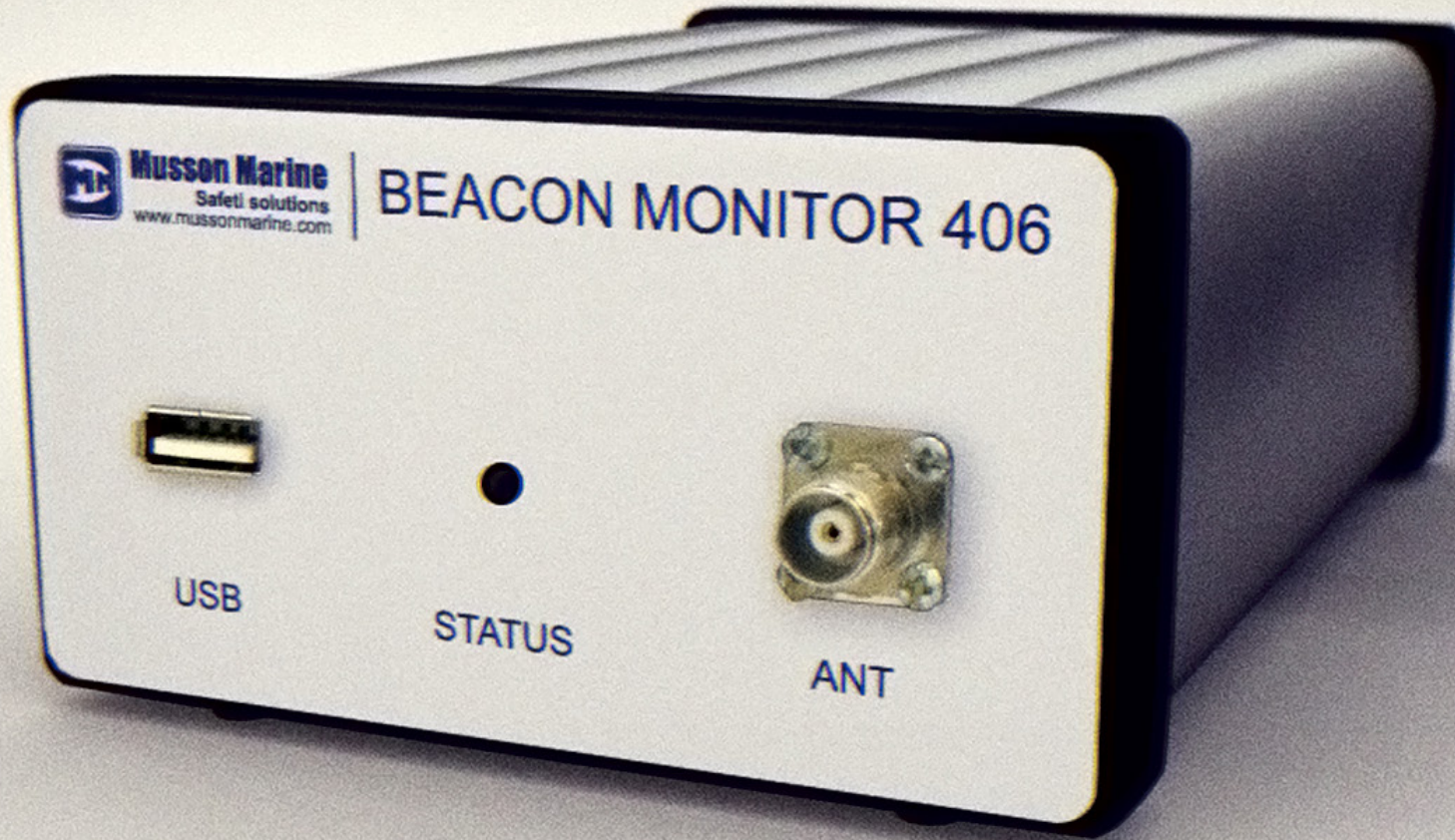


Sarsat Beacon Monitoring System



Test Equipment

Sarsat Beacon Monitoring System

General Description

Cospas-Sarsat Distress Signal Homer Receiver (further Sarsat Beacon Monitoring System – 406MHz emergency radio beacon monitoring system) is specially designed for 406MHz emergency radio beacon signals detection, reception, verifying, decoding and positioning.

The device is intended to be used by airport services, search and rescue (SAR) teams etc.

Sarsat Beacon Monitoring System is a wide range ground/mobile real-time COSPAS-SARSAT signal decoder designed to locate and verify emergency distress signals sent by any 406MHz ELT in local search area.

Sarsat Beacon Monitoring System provides monitoring and processing of signal from any 406MHz beacon, emergency locator transmitter (ELT), or crash position indicator/automatically deployable emergency locator transmitter (CPI/ADELTA).

Efficient use

This system has various potential efficient use fields.

Integrated rescue operation facility

It is important to detect and locate promptly the crashed aircraft and downed aircrew. At present the 406MHz beacons, including those with built-in GPS, are worldwide required to be installed on any aircraft. The 406MHz beacons are used by land or airborne search and rescue forces to perform immediate rescue operation.

The **Sarsat Beacon Monitoring System** should be used as integrated rescue operation facility in case of distress to perform it in most immediate and efficient way.

System provides the direct detection and signal location by mobile land teams or airborne rescue forces.

Certification and verify system

The device provides to perform the annual or regular 406MHz ELT operation test procedure by reception, encoding and check of all beacon's parameters.

Sarsat Beacon Monitoring System allows to verify the ELT on air that clearly demonstrates and confirms its operation.

Airport authorities are able to issue 406MHz ELT operation test certificates by themselves and contribute it to the airport services costs.

Device allows to locate and process all false emergency signals on local area and gives the right to airport authorities to contribute penalty charges for false distress signal in accordance with Cospas-Sarsat recommendations.

Operation / Features

Receiver has an option to detect and receive any signals on the frequency of 406 MHz: from 406, 022 to 406, 060MHz. It means that it covers all Cospas-Sarsat range and any beacon signal will be well received including any new manufactured beacons operating on new C/S frequencies.

- Real time 406MHz beacon monitoring, ID encoding and positioning;
- PC connection by USB interface;
- System sensitivity -115 dBm;
- Reception, decoding and displaying the data of all Cospas-Sarsat beacons;
- Test emergency message tracking for 406MHz beacon regular check;
- Automatically signal power measurement on 406MHz channel and distance estimation for beacons without GPS. Positioning and distance measurement for beacons with built-in GPS, GLONASS, GALILEO;
- Complete beacon database;
- Alarm in case of emergency signal reception;
- All Cospas-Sarsat frequency 406 MHz range monitoring.

System versions

The Sarsat Beacon Monitoring System is available in two versions

Mobile version

The mobile version of Sarsat Beacon Monitoring System is designed to be used by mobile land or airborne search and rescue teams.

Fixed version

The fixed version is specially designed to be used by airport authorities and offers the maximum flexibility in installation and integration.

Connection to PC or laptop

Sarsat Beacon Monitoring System requires to be connected to any PC or laptop for proper operation. The connection is carried out by means of standard USB cable or Ethernet port and special software. The minimal requirements are Microsoft OS, such as Windows XP, Windows Vista or Windows 7 or 8. No special hardware configuration is required.

Also the special FTDI driver should be installed for proper connection. It can be downloaded at our web-site as well.

It is very simple to connect the tester to PC. Connect one side of the cable to tester and other to PC. Then install the drivers following the standard Windows wizard. After the driver is installed run the software. No installation is required. Just run the software and start operation.

Technical description

- Power supply - 6-12 V;
- Power input – no more than 30dBm;
- Sensitivity on the frequency of 406 MHz -115 dBm;
- Dimensions - 180x120x65 mm;
- Message decoding – all existed Cospas-Sarsat protocols.

Complete set of the Sarsat Beacon Monitoring System

The complete set of the device includes the main data receiving unit, antenna cable and fixed antenna for outdoor attachment.

Main unit can be integrated with PC/laptop by means of USB cable. Specifically developed software runs automatically for further data processing. System receives and decodes all the Cospas-Sarsat signals.

- Receiver unit
- Antenna cable
- Fixed antenna
- USB – USB cable
- Power supply unit
- User manual(English)
- Software

System provides the possibility to create a receiver's network using Ethernet protocol for wide area network covering.

