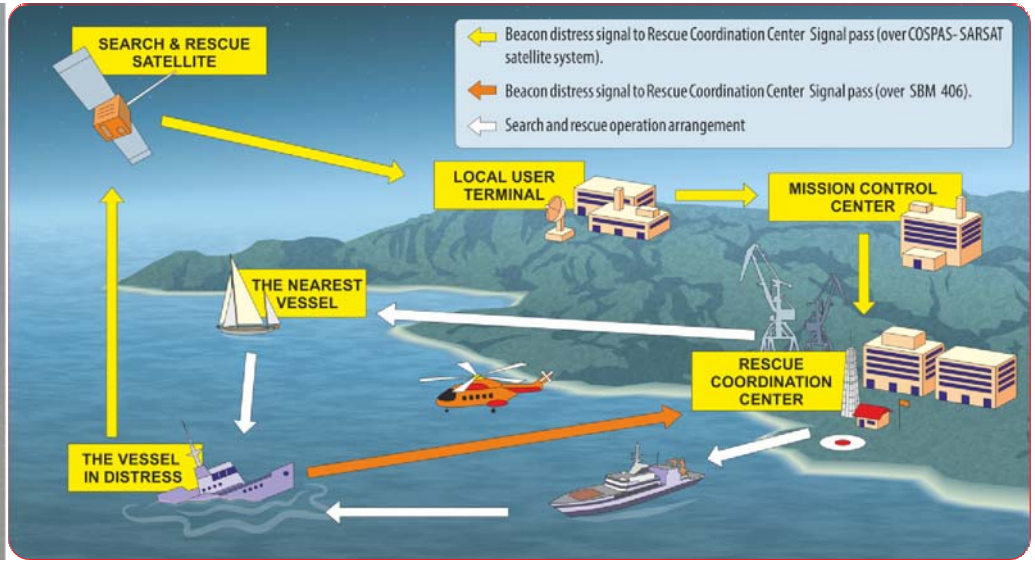


General Description

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 and/or seaport services, search and rescue (SAR) teams, rescue marine centers, coast guard rescue centers or GMDSS rescue coordination centers.

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 or EPIRB in local search area.

Sarsat Beacon Monitoring System provides monitoring and processing of signal from any 406MHz beacon (EPIRB), emergency locator transmitter (ELT), Ship Security Alert System (SSAS), personal locator beacons (PLB), or crash position indicator/automatically deployable emergency locator transmitter (CPI/ADELT). Software support allows to observe distress signals and beacon position data on any PC.

Efficient use

This system has various potential efficient use fields.

Integrated rescue operation facility

System reduces the emergency signal reception and processing time in coast guard rescue service responsibility local zone and, by means of AIS integration, displays the received signal with distress positioning on PC. In such a case operator quickly observes the nearest vessel, mobile land team or airborne rescue forces in local zone that is able to render assistance and requests for help.

This allows receiving signal 5 to 30 minutes faster than by satellite channel path and start the rescue operation immediately.

Even if take into account that main navigational areas are overlaid by GEO satellites and distress signal is received at first message the time lag nevertheless will be about 5-10 min, or up to 40 minutes near equator. As the device has AIS signal receiving system (optional) it is obvious that center operator immediately sees the distressed object nearest vessel and gives instructions for vessel rescue operation via VHF connection.

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.

Certification and verify system

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

As for marine services, the device allows to carry out the annual or regular EPIRB operation check procedure in volume of IMO requirements by reception and check of all beacon's parameters. So, port authorities also get right to issue EPIRB operation check certificate by themselves.

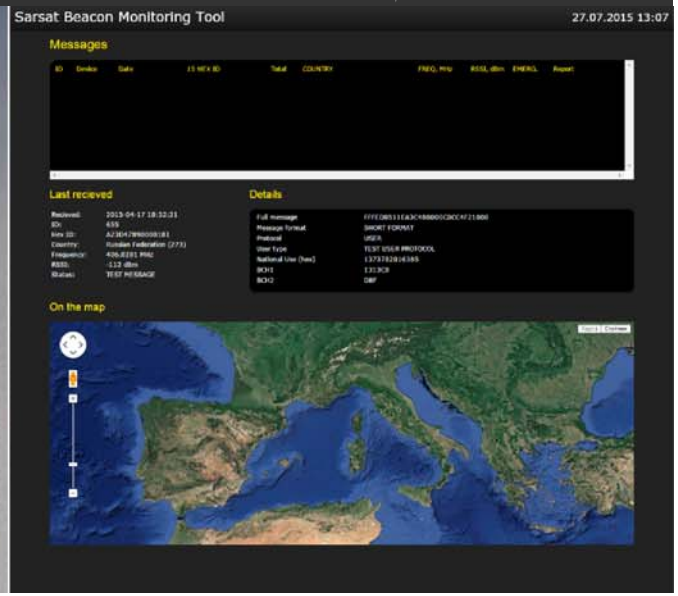
Device allows to locate and process all false emergency signals on local area and gives the right to port and airport authorities to contribute penalty charges for false distress signal in accordance with Cospas-Sarsat recommendations.

Operation / Features

Receiver has an option to detect and receive any signals on the frequency of 406MHz: from 406,0 to 407,0MHz. 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;
- Integration to devices network to cover large areas by means of Ethernet;
- System sensitivity -115dBm;
- 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 406MHz range monitoring.

Smith Aerospace
Test Systems Inc.
Smith Aerospace Test Systems Inc.
Address: Buznika Str. 5, Suite 114, Nikolaev, Ukraine, 54010
Tel: +38 0512 45 40 45; Fax: +38 0512 584 199
E-mail: info@elttesters.com; Web-site: www.elttesters.com
Ukraine Reg. No. 31222777 , Ukraine VAT Reg. No. 312227727053
Quality Management System REGISTERED TO ISO 9001:2012



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, marine or airborne search and rescue teams.

Fixed version

The fixed version is specially designed to be used by airport or seaport 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.

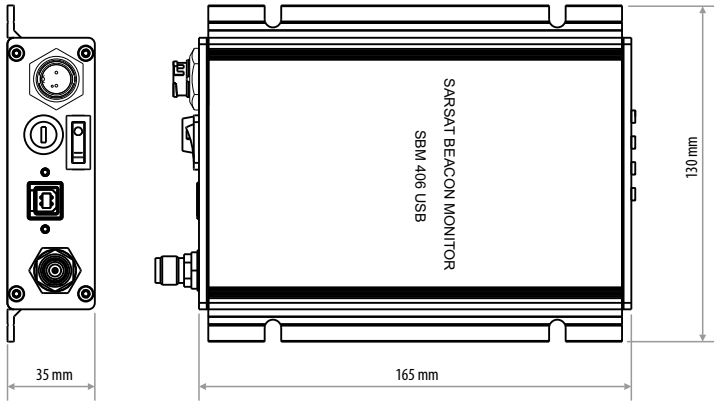
Device can be integrated to network of devices with data saving on central server available at Internet.

Technical description

- Power supply – 6-12V;
- Power input – no more than 30dBm;
- Sensitivity on the frequency of 406MHz – 115dBm;
- Dimensions – 180x120x65mm;
- Message decoding – all existing Cospas-Sarsat protocols.

Complete set of the Sarsat Beacon Monitoring System

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



Smith Aerospace
Test Systems Inc.
Smith Aerospace Test Systems Inc.
Address: Buznika Str. 5, Suite 114, Nikolaev, Ukraine, 54010
Tel: +38 0512 45 40 45; Fax: +38 0512 584 199
E-mail: info@elttesters.com; Web-site: www.elttesters.com
Ukraine Reg. No. 31222777 , Ukraine VAT Reg. No. 312227727053
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