OEM module system Cospas-Sarsat, AIS and DSC VHF

This OEM module is designed for use in all types of Cospas-Sarsat devices, such as EPIRB, PLB, ELT, and also for other different types of rescue equipment as MOB, AIS PLB, EPIRB-AIS, AIS-SART, rescue tools (emergency buttons) for installation on trucks, lost containers tracking facilities, for MSLS device (MSLD) and other device combinations according to RTCM 11901.1

Main features of suggested OEM modules are described below.

**Cospas-Sarsat 406MHz OEM module part number is MS-CS M1**

- Cospas-Sarsat frequency is adjusted from 406.00 to 406.1MHz, with step 3kHz
- Channel 406MHz power: 37dBm ±2dBm (SW)
- Modulation: phase modulation ±1.1Rad
- Modulation method: digital, with phase discretization 0.005Rad
- Spurious emission attenuation: not less than 40dB
- Bit rate: 400Baud
- ID and MMSI programming from PC
- Power supply: 4.8-7.2V
- Average current consumption: 40mA
- Operation modes: emergency / test
- Self-testing: battery voltage, output power, frequency capture, GPS coordinates presence
- Operation temperature: -20°C to +55°C
- PCB size: 55x30mm, height with add-on components not more than 9.5mm
- PCB weight: not more than 17gr
- Compliancy: ETS300 066, Cospas-Sarsat CIS T.001, CIS T.007.

**Cospas-Sarsat 406MHz OEM-module part number – MS-ACS M1**

Adding to device MS-CS M1 specifications.

**AIS-SART channel specifications**

- Operating frequency: 161.975MHz
- Power: 33dBm (2W)
- Modulation: GMSK
- Modulation method: digital
- Frequency stability: ±2ppm
- Spurious emission attenuation: not less than 40dB
- Bit rate: 9600Baud
- ID and MMSI programming from PC
- Operation modes: emergency / test
- Self-testing: battery voltage, output power, frequency capture, GPS coordinates presence
- Average current consumption (including GPS): 12mA

**DSC channel specifications**

- Operating frequency: 156.525MHz (channel 70)
- Power: 33dBm (2W)
- Modulation: G2B
- Modulation method: digital
- Frequency stability: ±2ppm
- Spurious emission attenuation: not less than 40dB
- Bit rate: 1200Baud
- ID and MMSI programming from PC
- Operation modes: emergency / test
- Self-testing: battery voltage, output power, frequency capture, GPS coordinates presence
- Average current consumption (including GPS): 10mA

**General specifications**

- Power supply: 4.8-7.2V
- Operating temperature: -20°C to +55°C
- PCB size: 70x30mm, height with add-on components not more than 9.5mm
- PCB weight: not more than 20gr
- Compliancy: ETS300 066, Cospas-Sarsat CIS T.001, CIS T.007; IEC_61097-14; IMO Resolution.

Outdated frequencies 121.5 and 243MHz can be added – more information if requested.

Operation in lower temperatures is possible – more information if requested.

**Options**

- Soft- and hardware for coding and parameter installation by manufacturer – part number PSH M1
- Software, coding tool and its design docs for ID changing on frequency 406MHz, AIS and DSC – the set should be sent to dealer and service centers for coding specially for user – part number CS M1.

On images 1 and 2 process connectors are used. It is clearly visible original connectors that are used.