



**Musson Marine**  
Safety solutions

# ***GMDSS Tester!***

## **MF/HF/VHF DSC MARINE RADIO TEST SYSTEM MRTS-7**



MF/HF/VHF DSC Marine Radio Test System (MRTS-7) is designed to check the MF/HF/VHF stations with DSC by means of SENDING/RECEIVING of DSC messages on all allowed frequencies. Besides of that Test system can be used as frequency meter and HF oscillator.

Send either GMDSS distress signal or selective test call to a particular MMSI on any of 6 distress frequencies on MF/HF as well VHF

Transmit/receive DSC signals on the international calling frequencies 2177.0 and 2189.5 kHz

Receive/check DSC signals on any of 6 distress frequencies on MF/HF/VHF

Measures the deviation of received signal on VHF

Measures and displays the mark/space frequencies of the received DSC signal

Measures and displays the transmitted and reflected power of received signal on VHF

All received and decoded DSC messages and all measured results can be viewed on LCD screen for later printout either directly to PC.

Tester is power supplied by external 12-28V dc source. Also tester can be connected to 100-240VAC/50-60Hz by adaptor.

**MF/HF/VHF GMDSS Tester:**



**Features and main operation modes:**

- "DSC SEND" mode
  - GMDSS 'distress signal' on frequencies:
    - MF - 2187.5 kHz
    - HF - 4207.5;6312.0;8414.5;12577.0;16804.5 kHz
    - VHF - 156525 kHz
  - Test message to MMSI addressed to a particular MMSI on frequencies
    - (Individual Call - Safety):
      - MF - 2187.5 kHz
      - HF - 4207.5;6312.0;8414.5;12577.0;16804.5 kHz
      - VHF - 156525 kHz
    - (Individual Call - Routine):
      - MF - 2177.0;2189.5 kHz
      - HF - 4219.5;6331.0;8436.5;12657.0;16903.0 kHz
      - VHF - 156525 kHz
  - TFC on international frequencies

Built-in HF-attenuator allows to measure the receiver sensitivity of checked station

- "DSC RECEIVE" mode on following frequencies:
  - MF - 2187.5;2177.0;2189.5 kHz
  - HF - 4207.5;6312.0;8414.5;12577.0;16804.5 kHz
  - 4219.5;6331.0;8436.5;12657.0;16903.0 kHz
  - VHF - 156525 kHz

The level of received signal is measured and displayed. The DSC message content can be decoded and viewed on LCD display. All test results can be stored for further printout or processing by PC.

- "Frequency meter" mode.
 

Tester allows to measure the frequencies in range from 100kHz to 1000MHz at signal level of -30dBm/7.07mVrms till 20dBm/Vrms.

- "LAB" mode
 

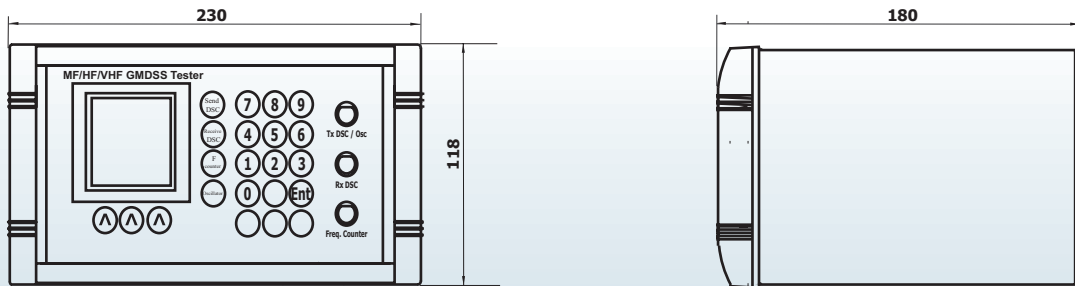
Tester allows to measure the frequency deviation on 6,8,17 VHF channels

Also tester can be used as HF-oscillator forming the signal in range of 1.5-200MHz with level of 40dBuV till 106dBuV (100uV-200mV), 1000 MHz at signal level -30dBm/7,07mVrms to 20dBm/2,24Vrms.

**Specification:**

- Frequency measurements general: +/-0.2ppm +/-1 digit
- Frequency measurements Ch70: +/-0.2 kHz
- Output signals:
  - Nominal frequency +/-0.2ppm
- Frequency deviation measurements: +/-0.5kHz (+/-0.1kHz at 5kHz)
- Ambient temperature: 0 to 50 Deg.C
- Storage temperature: 30- to +60 Deg.C
- Weight: 2.5 kg

**Dimensions (mm):**



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