

**SPECIFICATIONS OF INMARSAT MINI-C MES
FELCOM 19**

1 GENERAL

- 1.1 Transmitting frequency 1626.5 to 1646.5 MHz
- 1.2 Receiving frequency 1537.0 to 1544.2 MHz
- 1.3 Channel interval 5 kHz
- 1.4 G/T Better than -23.7 dB/K (elevation angle 5°)
- 1.5 EIRP 7 to 16 dBW (elevation angle 5°)
- 1.6 Modulation BPSK
- 1.7 Modulation rate 600/1200 sps
- 1.8 Coding Convolution with coding rate 1/2 and constraint length 7
- 1.9 Decoding Viterbi decoder

2 ANTENNA UNIT

- 2.1 Antenna type Daisy loop antenna
- 2.2 Receiving gain 33 to 40 dB
- 2.3 Receiving NF 1.7 dB or less
- 2.4 Transmitting gain 26 to 40 dB
- 2.5 Polarization Right-hand circular polarization
- 2.6 Axial ratio Within 6 dB (5° to 90°)
- 2.7 VSWR 2.0 or less (50 ohm)

3 INTERFACE

- 3.1 Number of port
 - Serial I/O: 1 ch, Input: 1 ch, Internal GPS board
 - Alarm (output) 1 ch, Contact closure, Normal close
 - LAN 1 port, RS-485, 1200 bps
- 3.2 Data sentences
 - Serial IEC61162-1 Ed.3/4
 - Input BWC, BWR, DBT, DTM, GGA, GLL, GNS, GSA, MTW, RMA, RMB, RMC, VDO, VDR, VTG, WPL, ZDA
 - Ethernet IEC61162-450
 - Input ACK, ACN, HBT
 - Output ALC, ALF, ALR, ARC, HBT
 - Output proprietary sentences
 - PFEC rminf, rmalr
- 3.3 IEC61162-450 transmission group
 - Input Arbitrary (default: MISC)
 - Output RCOM
- 3.4 Other network functions (except IEC61162-450)
 - DHCP, AutoIP, SMTP, POP3, PC terminal connect Protocol, Furuno Management Protocol (FMP)

4 POWER SOURCE

- 4.1 Communication unit 12-24 VDC: 3.8-1.9 A (Transmitting), 0.8-0.4 A (Receiving)
- 4.2 AC/DC power supply unit
PR-240 (option) 100-115/200-230 VAC, 1 phase, 50/60 Hz, 24 VDC from battery

5 ENVIRONMENTAL CONDITION

- 5.1 Ambient temperature
Exposed equipment -35°C to +55°C (storage: -35°C to +70°C)
Protected equipment -15°C to +55°C
Note: Antenna unit is categorized as an outdoor installation equipment and other units are for indoor installation.
- 5.2 Relative humidity 95% or less at +40°C
- 5.3 Degree of protection
Antenna unit IP56
Communication unit IP20 (IP22: option)
SSAS alert unit IP20 (IP22: option, bulkhead mount)
Junction box IP20 (IP22: option, tabletop mount)
- 5.4 Vibration Inmarsat SDM LPSES standard

6 UNIT COLOR

- 6.1 Antenna unit Upper: N9.5, Lower: 2.5PB3.5/10
- 6.2 Communication unit/Junction box N2.5
- 6.3 Others 2.5GY5/1.5