

**SPECIFICATIONS OF INMARSAT FLEETBROADBAND
FELCOM 250**

1 GENERAL

- 1.1 Transmit frequency 1626.5 MHz to 1660.5 MHz
- 1.2 Receiving frequency 1525.0 MHz to 1559.0 MHz
- 1.3 Channel interval 1.25 kHz
- 1.4 G/T Better than -15.5dB/K
- 1.5 EIRP 15.1 dBW

2 ANTENNA UNIT

- 2.1 Antenna type Patch array antenna
- 2.2 Gain Greater than 11.0dBi
- 2.3 Axial ratio Less than 4.0dB
- 2.4 Antenna beam width 40° approx. (at -3 dB)
- 2.5 Stabilization Three-axis control
- 2.6 Positioning Az: 0° to 360°, El: 5° to 90°
- 2.7 Position accuracy Within 0.6dB (95% time)
- 2.8 Tracking Electrical beam tracking system

3 COMMUNICATION UNIT

- 3.1 Communication services
 - Voice 4 kbps AMBE+2 or ISDN3.1 kHz audio*
 - Data Standard IP 284 kbps (RX, best effort)
 - Short message service Up to 160 characters
 - Facsimile Group 3 facsimile via 3.1 kHz audio*
- 3.2 Modulation QPSK, 16QAM

*: Voice and facsimile communications are available at satellite elevation 20° or more

4 INTERFACE

- 4.1 Ethernet 4 ports, 10base-T or 100base-TX, PSE class 0 (total up to 30.8 W)
- 4.2 Analog telephone/telefax 4 ports
- 4.3 RS-232C 1 port
- 4.4 Output alarm 1 port, contact closure (normal close), 400V, 120 mA max.
- 4.5 Navigation data input 1 port, IEC61162-1
- 4.6 L-band output 1 port
- 4.7 SIM card slot 1

5 POWER SUPPLY

- 5.1 Communication unit 12-24 VDC: 9.2-4.6 A (TX), 2.0-1.0 A (RX)
- 5.2 Handset PD class 2, 5 W or less
- 5.3 Incoming indicator PD class 1, 2 W or less

- 5.4 AC/DC power supply unit (PR-240, option)
 100-115/200-240 VAC, 1 phase, 50/60Hz

6 ENVIRONMENTAL CONDITION

- 6.1 Ambient temperature
 Exposed equipment: -25°C to +55°C (storage: -40°C to +70°C)
 Protected equipment: -25°C to +55°C
- 6.2 Relative humidity 95% at 40°C
- 6.3 Degree of protection
- | | |
|--------------------|---|
| Antenna unit | IP56 |
| Communication unit | IP22 (tabletop mount with a connector cover and grommets) |
| Handset | IP22 (cradle: IPX0) |
| Incoming indicator | IP22 |
| Incoming bell | IP20 (IP22: option) |
- 6.4 Vibration IEC 60945
- 6.5 Motion Roll: $\pm 30^\circ/8s$, Pitch: $\pm 10^\circ/6s$, Yaw: $\pm 8^\circ/50s$, Rotation: 6°/s,
 Speed: 30kt

7 UNIT COLOR

- | | |
|------------------------|------|
| 7.1 Antenna unit | N9.5 |
| 7.2 Communication unit | N2.5 |
| 7.3 Handset/ cradle | N2.5 |
| 7.4 Incoming indicator | N2.5 |
| 7.5 Incoming bell | N2.5 |