

SPECIFICATIONS OF INMARSAT FLEETBROADBAND FELCOM 500

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 -7dB/K
1.5	EIRP	22 dBW

2 ANTENNA UNIT

2.1	Antenna type	Patch array antenna
2.2	Gain	Greater than 17dBi
2.3	Axial ratio	Less than 2.0dB
2.4	Antenna beam width	22° 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	ISDN UDI/RDI 432 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

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: 12-6 A
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: $6^\circ/s$, 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