

Inmarsat Fleet F33

Inmarsat Fleet F33 is a single, integrated versatile solution that delivers the choice of voice, fax and communications.

The compact and low weight Inmarsat Fleet F33 antenna and below deck unit are particularly suitable for installation onboard a wide range of smaller vessels where space is at a premium, including sailing and motor yachts, fishing vessels, patrol boats, workboats and short-sea merchant ships. Fleet F33 offers an extensive array of features and benefits.

Voice

Inmarsat Fleet F33 service offers quality voice communications on a virtually global basis* through a 4.8kbps voice channel. This features Advanced Multi-Band Excitation (AMBE) to compress waveforms for optimum speech quality.

Fax

The circuit-switched channel also provides Group-3 9.6kbps fax for vessel-to-shore, shore-to-vessel and vessel-to-vessel applications.

Data

Fleet F33 also meets increasing demands for data communications onboard smaller vessels through a 9.6kbps circuit-switched data channel. This channel is available in the Inmarsat spot beams**.

Integrated V.42bis and V.44 compression algorithms accelerate data speeds, giving an effective throughput of up to 40kbps in comparison with an uncompressed 9.6kbps/s connection.

Compression is automatically pre-selected by the Fleet F33 terminal, but users have the option to manually select the protocol they wish to use, namely: No compression; V.44; or V.42bis. Manual selection allows the user to match their compression to the known compression

standard of the recipient. Compression ratios are dependent on both the file type and content.

Packet Data

Inmarsat's unique Mobile Packet Data Service (MPDS) is offered through Fleet F33. MPDS is a cost-effective packet-based service that charges only for the amount of data sent and received, not the time spent online. This facilitates 'always on' connectivity to the Internet or corporate/private networks.

Fleet F33 MPDS operates at variable speeds depending on whether data is being uploaded or downloaded. In the download direction, transfer rates of up to 64kbps are possible, while upload rates of up to 28kbps are enabled. This difference in speed allows for the fact that most Internet query commands contain less data than most response commands.

Call waiting

Call waiting is available to notify users of the presence of an incoming voice, fax or data call while they are conducting an MPDS session.

When the call-waiting alert is received, the user will have the choice of whether to accept the incoming call or not. To aid this decision, the display on the Fleet F33 terminal handset will indicate the type of incoming call together with the caller ID number if available.

For incoming voice calls, the user can simply pick up the phone as normal to answer them. The Fleet F33 terminal will automatically disconnect the MPDS session, and an optional screen alert on the user's PC can highlight this. If the user decides not to accept the incoming call, either by explicitly rejecting the call alert or letting the call ring time-out, then the MPDS session is left connected and unaltered.

Secure connections

MPDS facilitates a range of security enhancements for PC protection and the transmission of sensitive data.

Uses and applications

Because Fleet F33 utilizes Internet Protocol (IP), it is compatible with an extensive range of commercially available off-the-shelf software, as well as specialized user applications. This makes it an ideal solution for:

- e-mail
- instant messaging
- universal messaging, including SMS
- Internet and private network access
- office applications
- 'thin client' applications
- secure communications
- data file transfer, including FTP and digital images
- online electronic chart updates
- real time weather information
- fishing and oceanographic applications
- vessel telemetry and SCADA applications
- voice and crew calling
- Group-3 fax

Terminal specifications

Feature	Details
Terminal variants	Fleet F33 terminals support Global* 4.8kbps voice, 9.6kbps G3 fax, spot beam 9.6kbps circuit-switched asynchronous data and spot beam MPDS. Check with manufacturer for full details of supported services.
BDE terminal weight	The Below Deck Equipment (BDE) weighs about 1.5kg. This includes the power supply unit and the main communications unit. Peripheral equipment such as handsets, distribution unit, distress box, fax machines, PCs etc are additional.
BDE terminal size	The BDE measures approximately 310mm by 180mm by 80mm.
Antenna weight	The antenna unit, which includes the radome, the stabilised antenna dish with tracking electronics and RF (Radio Frequency) equipment, weighs around 8kg.
Antenna size	Typically a semi-spherical 0.4m diameter radome.
SIM card (option)	The SIM card identifies the user using the terminal. The card contains the numbers that are used to contact this user and defines the preferences, such as the network service provider, stored number list etc. A PIN number prevents unauthorised use.
Telephone handsets	The BDE permits a number of handsets to be connected, either 2-wire analogue or ISDN. Handsets may be placed up to 100m away from the BDE.
Power	The BDE input power is 19 to 32VDC. Power consumption is a maximum of 110W in transmit mode. This is for the BDE alone and excludes peripherals such as fax machines and PCs.
Operating conditions	The ambient operating temperature for the ADE is -25° C to +55° C.
Connectors	Analogue telephone port (RJ45) ISDN (RJ45) RS422 serial port USB serial port RS232 serial data port (accessed via an enhanced AT command set)
Configuration	The operational characteristics and port settings of the Fleet F33 Mobile Earth Station (MES) can be configured using a PC connected to the RS232 or USB ports. The information on how to do this is provided in the user manual from each manufacturer. (Accessed via an enhanced AT command set).
User interface	The user interface may either be through the liquid crystal display on the ISDN handset together with the keys on the handset, or through menu screens on the PC.
Coverage	Global beam coverage for voice*. All other services are available in the Inmarsat spot beams**.

* Polar restrictions apply