

## Inmarsat Fleet F77 128kbps Service

**The Inmarsat Fleet F77 128kbps service is a valuable addition to the Inmarsat Fleet family supporting 128kbps Mobile ISDN.**

The Inmarsat Fleet F77 128kbps service provides an extension to the Inmarsat Fleet F77 service to meet the varied communications and data requirements of the maritime industry. The demand for higher data rates and e-mail services in the maritime industry have risen steadily in recent years, and the Fleet F77 128kbps service is designed to meet these higher data capability needs. This is enabled with either a firmware or a hardware upgrade, whilst providing voice distress and safety services to meet the latest requirements of the Global Maritime Distress and Safety System (GMDSS).

Fleet F77 provides users at sea with a single, integrated terminal platform, delivering both mobile 128kbps ISDN data, 64kbps Mobile Packet Data Service (MPDS), together with voice and fax services. The latest requirements of the GMDSS, entailing pre-emption and prioritisation of voice calls over lower priority voice and data traffic, are met in full by Fleet F77.

### Uses and applications

- Ship to Shore to Ship voice and data communications
- Fast remote network access
- Fast access IP (Internet Protocol) services via ISDN dialup networking
- Onboard ship solutions, such as:
  - Videoconferencing
  - E-mail and data communications
  - Ship Management Applications
  - On-line chart updates
  - On-line weather information
  - Vessel telemetry

### Features and Benefits

- A powerful communications solution providing the flexibility to meet communications and higher data rate requirements for shipping
- Provides extensive maritime coverage, to meet demands of commercial shipping
- Provides valuable efficiency savings: Data can be sent more quickly and cost-effectively
- Broad compatibility with standard 128kbps ISDN applications and dialup access providers

### Fleet F77 Service Summary

- Mobile 64kbps ISDN service
- Mobile 128kbps ISDN, for larger bandwidth and file-size requirements
- Inmarsat Mobile Packet Data Service, for immediate short-burst data and 'always on' capability (including option for Call Waiting)
- Global voice and fax services (including Group-3 9.6kbps fax option)
- Meets the latest requirements of GMDSS voice distress and safety requirements, relating to distress handling and pre-emption

## Terminal specifications

| Feature                | Details   |
|------------------------|---|
| Terminal weight        | The weight of the BDE (Below Deck Equipment) is typically 4-5 kg. This includes the power supply unit and the main communications unit. Peripheral equipment such as handsets, distribution unit, distress box, fax machines, PCs etc comes in addition to what is referred to as BDE.    |
| Terminal size          | The BDE measurements are approximately 380x3880x70 mm.  |
| Weight of antenna unit | The weight of the antenna unit is typically 40 kg. This includes the radome, the stabilised antenna dish with tracking electronics and RF (Radio Frequency) equipment.  |
| Antenna radome size    | Typically a semi-spherical 0.8 -1.2metre diameter dome.   |
| SIM card (optional)    | 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, preventing unauthorised use, protects use of the SIM card. |
| Telephone handsets     | The BDE permits a number of handsets to be connected, either 2 wire analogue or ISDN. Handsets may be up to 100 metres away from the BDE.   |
| External power         | The BDE input power is 110V or 220V± 10% (90 VAC to 276 VAC).   |
| Power consumption      | Power consumption is typically 200 W in idle mode, 300 W in transmit mode. This is for the BDE alone and excludes any peripherals such as fax machines and PCs.   |
| Operating conditions   | The ambient operating temperature for the BDE is 0-45° C. To secure adequate cooling there should be a minimum 10 cm unobstructed clearance all the way around the BDE.   |
| Connectors             | 2 wire analogue telephone ports (RJ11)<br>ISDN (RJ45)<br>RS422 serial port<br>USB serial port<br>RS232 serial data port (accessed via an enhanced AT command set)   |
| Configuration          | The operational characteristics and port settings of the 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               | The F77 128kbps service Initial operation will be spot beam. For more information about Inmarsat's Fleet coverage visit <a href="http://www.inmarsat.com/coverage">www.inmarsat.com/coverage</a> .  |
| GMDSS                  | The terminal supports the latest IMO requirements related to GMDSS (Global Maritime Distress and Safety Services). This relates to distress handling and pre-emption according to A888.21.  |