

Technical Specifications

The Inmarsat Global Area Network supports Mobile Packet Data service, Mobile ISDN service, voice and low speed data and fax. This data sheet describes the uses, features and benefits of the Mobile ISDN service. (For details of the Mobile Packet Data service, refer to the data sheet for Mobile Packet Data).

The Mobile ISDN service provides dial on demand, full duplex 64kbit/s ISDN circuit from a compact, battery operated unit that can be used from virtually anywhere on earth. This compares with a 9.6kbit/s that is commonly supported by GSM Cellular and many other mobile satellite operators.

Using the Mobile ISDN service, calls are generally charged only for connect time.

Uses

The Mobile ISDN service is used wherever a dedicated link is needed between the mobile user and the corporate network. For instance:

- Broadcast-quality audio
- Fax transmissions, either sending or receiving
- Videoconferencing
- Audio streaming
- Secure communications using, for example, STU-III
- Batched e-mail
- File transfer

Note: The Mobile ISDN service can also be used for a range of other applications, such as Internet access, Local Area Network Access and corporate e-mail. However, it may be more cost-effective to use the Mobile Packet Data service for these applications.

Features and Benefits

- A cost-effective, high-speed solution to many standard office applications
- Simple to configure and quick and easy to set up
- Compact and versatile equipment, with a range of interfaces with PCs and other hardware

Service Characteristics

- 64kbit/s ISDN supporting:
 - 64kbit/s UDI (Unrestricted Digital Information) to support videoconferencing, Group 4 fax machines and other ISDN terminal
 - 64kbit/s speech for ISDN telephones
 - 64kbit/s 3.1 kHz audio to support analogue devices such as Group 3 fax at speeds up to 14.4kbit/s, modems at speeds up to 33.6kbit/s and secure telephone systems such as STU-III
 - 56kbit/s data (primarily for North American use)

Hardware

The Mobile ISDN services are supported by a number of different manufacturers' hardware. Although the technical details vary from one hardware product to another, there is a generic set of features that apply to all of the products.

Feature	Details
Lightweight	The units typically weigh between 3.5kg and 5kg (7.7lbs and 11lbs), including the modem unit, battery and antenna.
Compact	Typical dimensions when collapsed are approximately 300mm x 200mm x 60mm (11.8" x 7.9" x 2.4").
SIM card	The SIM card identifies which user is using the MSU. The card contains the numbers which are used to contact this user and defines user preferences, such as the network service provider, stored number list and so on. Use of the SIM card is protected by a PIN number, preventing unauthorised use.
Telephone handset	Depending on the product, the telephone handset is either built in to the modem unit, or the product uses standard DECT cordless handsets.
Battery life	Battery life depends entirely on what the equipment is being used for and the conditions, but you would typically expect to get about 70 hours of standby and around 4 hours for voice.
Battery type	NiMH or Lilon
External power	The units typically have a DC input in the range 9.5 - 19 VDC (some products accept variable input range). All products provide an AC adapter accepting 90 - 264 VAC, 47 - 63 Hz.
Minimum environmental conditions specifications	Operating -25°C to +55°C Storage -25°C to +55°C
Connectors	Typical connectors provided by a product are: ISDN NT1 For connection to standard ISDN equipment. RS-232 For connection to a PC via a 9 pin DSUB connector. Universal Serial Bus (USB) For connection to other USB enabled equipment, such as PCs. Antenna TNC/BNC type connector for connecting the co-axial cable from the antenna.
Configuration	The operation and characteristics of the modem unit can be configured using a PC connected to the unit via the RS-232 connector. The information for how to do this will be provided in the individual product user guides from each manufacturer. Whilst all MSUs come with default port assignments it is possible to change these assignments using this software.
User interface	The products each have some form of user interface, typically consisting of a liquid crystal display and a small number of keys for inputting information.
User support	The products are supplied with a CD-ROM containing a Windows-based user interface programme to configure the product, application notes, a user manual and other useful information.

Refer to the individual manufacturer's data sheets for information specific to their product at:

www.nera.no **www.tt.dk** **www.glocom-us.com**
www.eci.com **www.otter.co.uk**

For further information about Mobile ISDN, please contact:

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