

# Nera F33 The power of satellite communications via Inmarsat Fleet



Keeping you in touch  
with your world

**NERA**  
enabling a wireless future

# e-fish ency.

## Nera F33 - affordable email, fax, data and voice services



## State-of-the-art marine communications providing a range of cost effective applications

### Nera F33

This remarkable new Nera marine communications system is available now with worldwide availability.

Whilst based on the highly successful Nera F77 system for large merchant vessels, the Nera F33 has been specifically tailored to meet the needs of fishing vessels.

### Easy installation

Nera F33 is notably easy to install. It does not even need a Nera regional service centre to do the job. Customers will find that they can easily do it themselves.

### Quick configuration

Below-deck equipment with the Nera F33 connects easily (plug and play) to telephone, PC and fax terminals. Configuration is fast and simple, using a PC man-to-machine interface.

### Unrivalled support - around the clock, around the world

Nera's continuous involvement in marine communications since 1978 has created a powerful company ethos built on the massive importance of product reliability and dedicated service and support. Nera F33 customers will benefit from the company's unique global network of regional service centres with Nera-trained and certified engineers. This service is provided 24 hours a day, 7 days a week in 30 key ports around the world.

### High quality mobile voice and data communications

Nera F33 introduces cost effective maritime communications. This state-of-the-art system provides you with telephone, fax, e-mail and Internet access - even when you are out of reach of conventional mobile phone or radio networks.

### Making fishing more productive

Just think what this means for your business. In an increasingly competitive and regulated industry, instant information provides the revenue edge every fishing operator seeks. With Nera F33 on board you are permanently online to vital intelligence on fish shoal positions, shifting weather patterns and chart updates. You can find the best fishing locations faster - and also save on fuel costs. Above all, Nera F33 gives you the means to make more informed, on-the-spot decisions. And that can make all the difference to your earnings.

### Cost-effective technology working for you

Designed specifically to meet the needs of fishing fleet operators and owners, Nera F33 delivers a cost-effective solution based on the state-of-the-art Inmarsat Fleet satellite platform. Thanks to its unique Mobile Packet Data Service (MPDS) capabilities, you can exploit a whole new generation of advanced maritime communication services.

### Vital information online, wherever and whenever you need it

Nera F33 facilities are 'always on' which means that users can have permanent access to the Internet and company intranets and extranets. As well as having access to the very latest fishing and weather information, you can also check business and personal e-mail, browse the web and join online discussion forums.

### Flexible and easy to use

Voice and fax quality are both very high with Nera F33 on board - virtually anywhere in the world. Instant messaging is another advantage, as are other Internet-sourced communications. Connection to PCs and laptops is just as straightforward as it is in a land-based office. It is a highly flexible system.

### Inexpensive to operate

Nera F33 is also a highly cost-effective communications package to operate. That is because you only pay for data actually transmitted and received - even though the system is permanently connected online. This also has the advantage of vastly reduced connection times - speeding the process of downloading data.

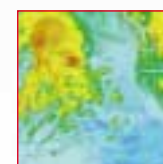
### Data/Internet Applications



Worldwide web



E-mail



Weather



Plankton information

#### • Access to worldwide web

Nera F33 gives you continuous Internet access to vital fishing, weather and oceanographic information which can make all the difference to your catches and profits. As well as navigational information and sea chart updates, you are also in constant touch with the latest data on plankton, sea surface temperature, surface currents and other environmental factors. In the increasingly competitive fishing industry, these have become the essential tools to help you make more informed decisions on where to find fish.

#### • Access to e-mail

E-mail also brings you important information instantly and reliably - and, of course, lets you communicate with other users easily and cheaply. Data speed from 9.6 kbps to 40 kbps compressed data.

### Fax Service



Group 3 fax (9.6 kbps)

#### • Access to Group 3 fax

Another important source of information on board - particularly for ship-to-shore communication.

### Global Telephone Service



Analogue global voice

#### • Access to global voice

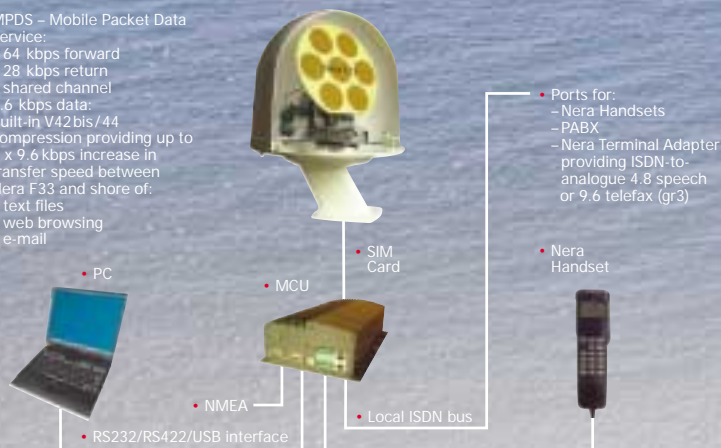
With Nera F33 installed you are always in touch - wherever you are on the seas. With this genuinely global voice service you can call ship to ship and ship to shore whenever you want. This provides you with security in the event of an emergency situation.



# Nera F33 – cost effective communications for medium sized motor and sailing yachts.

## System Diagram

- MPDS – Mobile Packet Data Service:
  - 64 kbps forward
  - 28 kbps return
  - shared channel
- 9.6 kbps data:
  - Built-in V42bis/44 compression providing up to 4 x 9.6 kbps increase in transfer speed between Nera F33 and shore of:
    - text files
    - web browsing
    - e-mail



- Ports for:
  - Nera Handsets
  - PABX
  - Nera Terminal Adapter providing ISDN-to-analogue 4.8 speech or 9.6 telefax (gr3)

- Nera Handset

## Technical Specification

### Services

#### Global service

Voice 4.8 speech (Mini-M voice)

#### Spot beam service

Voice 4.8 speech  
 Data 9.6 kbps data  
 Built in compression V42 Bis/V44, up to 40 kbps  
 Telefax 9.6 kbps fax G3  
 MPDS 64 kbps forward  
 28.8 kbps return  
 Shared channel

### Functions

Supervision from handset  
 Configuration from PC  
 Traffic log on PC or printer  
 Message indicator  
 Access code  
 Call restrictions  
 Sim card operation  
 Phone book (up to 100 numbers)

### Interfaces

#### Connectors

1 pc DC power connector  
 1 pc N-contact coaxial connector (RF)  
 2 pc RJ-45 ISDN connectors for Telephone/Fax/PC/PABX/Handset/DECT  
 1 pcs USB port  
 2 pc RS232

#### Terminals

4 pcs RS422  
 4 pcs ISDN (1 port) for external cables to PABX/DECT/PC/Handset/Telephone.  
 2 pcs NMEA input  
 2 pcs spare terminals

#### Other Interfaces

1 pc SIM card reader  
 4 pcs LEDs

#### Optional equipment

ISDN – Fax adaptor

#### Cabling ADE – BDU

RG 223 25m  
 RG 214 50m  
 RG 1/2 170m  
 S10172B11 140m

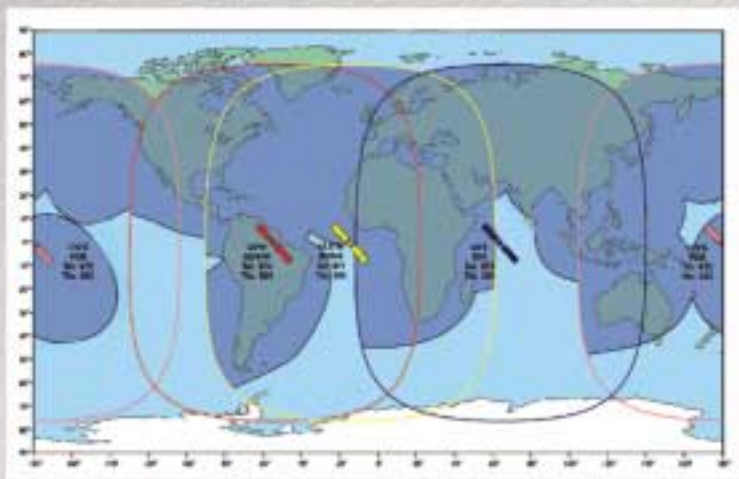
### Power

18-32 V DC  
 External 12 V DC (optional)

### Dimensions and weight

Antenna 8kg  
 40 x 40cm  
 MCU 3kg  
 Length 31cm  
 Width 18cm  
 Height 8cm

## Worldwide Coverage Map



**KEY** Limit of global beam coverage for Inmarsat A,B,C,D,E,M.

- Pacific Ocean Region
- Atlantic Ocean Region-West
- Atlantic Ocean Region-East
- Indian Ocean Region
- Inmarsat-phone coverage

## 50 years experience in satellite communications

Although the outstanding benefits of the Nera F33 system may be new to maritime customers, to Nera, satcoms technology has been a way of business life for more than half a century. This, combined with our heritage in marine communications, makes Nera the natural choice.



[www.nera.no](http://www.nera.no)



NERATEK AS, 1201 Oslo, Norway  
 Tel: +47 22763110 Fax: +47 22763111  
 e-mail: [post@neratek.no](mailto:post@neratek.no)

