

# SAILOR FLEET77 AND FLEET55



A wide horizon  
is a privilege,  
not a right

Today, being out of reach is not an option. Ship owners and operators want and need the very best from modern communications – constant access, anywhere.



With SAILOR Fleet77 and Fleet55, high-speed and cost-effective voice and data communication is a reality. SAILOR Fleet77 and Fleet55 combines the high-quality and speed of a 64 kbps/true ISDN service with MPDS (Mobile Packet-Data Service), making it possible to operate a mobile office at sea via satellite. This breakthrough in maritime communications optimises business opportunities and minimises cost by integrating the entire fleet in a corporate network.

MPDS provides a cost-efficient solution for staying on-line, because only the transfer of data is charged. MPDS is thus a convenient solution for e-mail, small and medium size

data transfer, LANs, VPNs and Internet access. The ISDN service provides a high-capacity channel with a constant data stream and is usually preferable for up or down-loading large files.

The high-speed data rates provide a new, wider range of applications to the deep-sea market. Maritime-specific information such as weather and electronic charts, are now available on-line and updated in real time at reasonable cost.

SC7707 Handset and CR7708 Distress Cradle



SC5507 Handset and CR5508 Cradle





### Satellite Antenna Units

The compact tracking antennas are line replaceable and the SAILOR SA7705 features a bottom hatch for easy service and maintenance access. The SAILOR SA7705 Antenna weighs 27 kg and the SAILOR SA5505 weighs only 18 kg. Both are very easy to install.

The maximum distance between antenna and transceiver is 70 metres using standard cable (or longer depending on type of cable). The antenna is a sensor stabilised platform with directional RHCP antenna, i.e. no cable unwrap.

### Transceiver Units

The transceiver units are a single channel system that enables interfacing to a broad variety of voice, fax and data communication solutions via the RJ-11, RJ-45, RS-232 or the USB port. The configuration module with its memory-resident data can be transferred to another transceiver unit without reconfiguration.

The intelligent handset is connected to the system for voice communication and for controlling the system. An additional three standard (RJ11) telephones can be connected directly to the system for voice communication. One of these can be replaced with a PABX making it possible to install more telephones for the flexible use of the terminal from different onboard locations. Standard Mini-M (4.8 kbps AMBE) voice is used for cost effective communication, and 64 kbps can be used when very high quality is required.

G4 fax is standard on the system and provides the best use of the Inmarsat services. G3 fax machines can be used with the system on 64 kbps speech. Mini-M fax service is now available.

### Handset Control Units

The intelligent 4-wire handset control units include an intuitive menu structure for full control of the transceiver unit.

### Cradles

The cradle for SAILOR Fleet77 includes a dedicated distress button and is thus prepared for GMDSS and Wheelmark approval. The SAILOR Fleet55 is a non-distress system and has thus a standard cradle without distress button. Both systems are delivered with 10m special cable from cradle/handset to transceiver.

#### SAILOR Fleet77 consists of

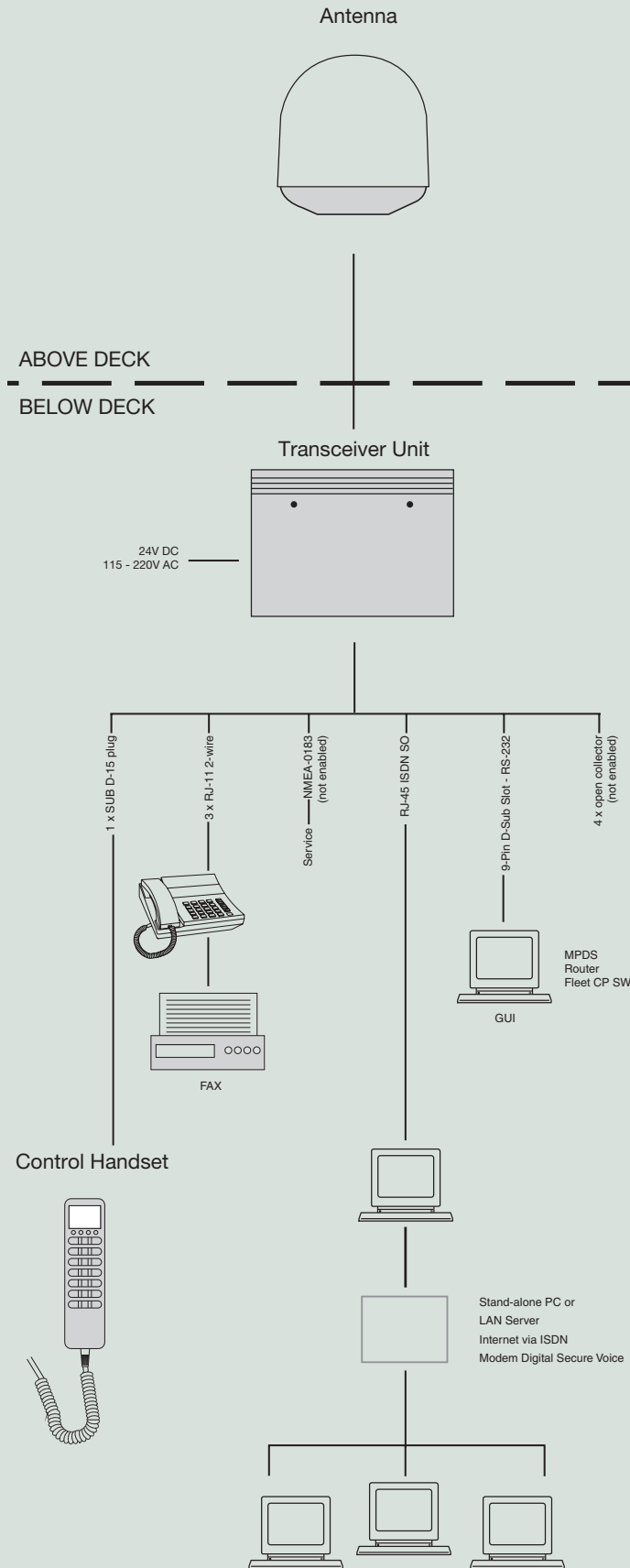
- One SAILOR SA7705 Antenna
- One SAILOR ST7706 Transceiver
- One SAILOR SC7707 Handset
- One SAILOR CR7708 Distress Cradle with 10m cable

#### SAILOR Fleet55 consists of

- One SAILOR SA5505 Antenna
- One SAILOR ST5506 Transceiver
- One SAILOR SC5507 Handset
- One SAILOR CR5508 Cradle with 10m cable

# SAILOR FLEET77 AND FLEET55 Specifications

## Configuration example



## APPROVALS

**SAILOR Fleet77:** Inmarsat Fleet77 approved. Compliant to FCC, title 47 part 25, section 25.216. Compliant to RTE, CE Marked.

**SAILOR Fleet55:** Inmarsat Fleet55 approved. Compliant to FCC, title 47 part 25, section 25.216. Compliant to RTE, CE Marked.

## COVERAGE SERVICES

**SAILOR Fleet77:**  
Global Services: Voice: 4.8 kbps Mini-M voice, Group 3 fax capability  
MPDS 64 kbps shared channel, ISDN 64 kbps PPP channel

**SAILOR Fleet55:**  
Global Service: Voice: 4.8 kbps Mini-M voice  
Spot Beam Services: Voice: 4.8 kbps Mini-M voice, Group 3 fax capability  
MPDS 64 kbps shared channel, ISDN 64 kbps PPP channel

## GENERAL

**Antenna:** Sensor stabilised platform with directional RHCP Antenna  
No cable unwrap. Maximum pointing error +/- 5 deg.  
**Ship Motions:** Roll +/-30°, Pitch +/-10°, Yaw +/-8°, Surge +/-0.2g,  
Sway +/- 0.2g, Heave +/-0.5g, Turning Rate 6°/s;1°s<sup>2</sup>,  
**Headway** 30 knots  
**Antenna Cable:** N/N male, max. cable loss 12 dB at 1.6 GHz, 0.5 ohm at DC.  
Max 70M length.  
**Rx Freq. Band:** 1525.0 – 1559.0 MHz  
**Tx Freq. Band:** 1626.5 – 1660.5 MHz  
**Channel Spacing:** 1.25 kHz – Rx

## INTERFACES

**Voice:** 4.8 kbps AMBE, 64 kbps  
**Async. Data Rate:** Euro ISDN 64 kbps and US ISDN 56 kbps  
**Phone/fax Interface:** 3 RJ 11 for 2-wire.  
**Data**  
**Serial:** 1 serial EIA compatible standard RS-232E, built-in Hayes compatible modem, up to 115 kbps, DB-9 female connector  
**Euro ISDN Interface:** ISDN NT1 S/T bus, ITU-T I.430, ISO 8877 compliant  
RJ 45 connector  
**USB Interface:** USB slave interface

## POWER SUPPLY AND CONSUMPTION

**Power Supply:** 24V DC  
**Power Consumption:** Max 200W

## ENVIRONMENTAL CONDITIONS

**Ambient Temperature:** 25C – + 55C  
**Relative Humidity:** 95% non-condensing at +40°C  
**Vibration (antenna):** 4-10 Hz 2.54 mm, 10-15 Hz 0.76 mm, 15-25 Hz 0.40 mm,  
25-33 Hz 0.23 mm  
**Mechanical Shock:** 20g/11ms half-sine

## DIMENSIONS AND WEIGHT SAILOR FLEET77

**Antenna:** 27 kg, Diameter: 840 mm, height: 880 mm  
**Transceiver:** 2.6 kg, 53.75 mm x 377 mm x 163.7 mm  
**Handset:** 0.24 kg, 200 mm x 52 mm x 33 mm  
**Distress Cradle:** 0.25 kg, 100 mm x 145 mm x 42 mm

## DIMENSIONS AND WEIGHT SAILOR FLEET55

**Antenna:** 18 kg, Diameter:570 mm, height: 680 mm  
**Transceiver:** 2.6 kg, 53.75 mm x 377 mm x 163.7 mm  
**Handset:** 0.24 kg, 200 mm x 52 mm x 33 mm  
**Distress Cradle:** 0.15 kg, 160 mm x 61 mm x 27 mm

Specifications subject to change without notice.

### The SAILOR Fleet77 and Fleet55 Systems

The user-friendly systems both consist of a small and compact transceiver, a lightweight and robust antenna, and an intelligent handset with cradle. The satellite transceiver units are supplied with a CD-ROM containing user-friendly software, which enables quick and easy configuration from a standard PC or from the intelligent handset. Both the SAILOR Fleet77 and Fleet55 are designed for customized configuration solutions that match the needs of the customer: the satellite transceiver unit interfaces to a broad variety of voice, fax and data communications.

#### SAILOR Fleet77

Covering from 76° North to 76° South, SAILOR Fleet77 provides a constant on-line access as well as being cost effective. The system fulfills the need for spot- and global beam coverage as well as distress requirements within the GMDSS.

#### SAILOR Fleet55

Designed for spot beam coverage only, but also with MPDS and ISDN,

which provides a strong solution for a broad variety of voice, fax and data communications. The small antenna of only 18 kg is easily fit on almost any ship.

#### SAILOR Fleet77 Features

- Spot- and global beam coverage
- MPDS (Mobile Packet Data Service), for constant on-line access
- 64 kbps mobile ISDN service
- 3.1 kHz Audio
- 64 kbps Speech
- Mini-M voice
- Fax (G3/G4)
- Global Voice Distress (Global coverage, 76° North to 76° South)
- Meets voice, distress and safety requirements for new satellite systems within the GMDSS

#### SAILOR Fleet55 Features

- Spot beam coverage
- MPDS (Mobile Packet Data Service), for constant on-line access.
- 64 kbps mobile ISDN service
- 3.1 kHz Audio
- 64 kbps Speech
- Mini-M voice, global coverage
- Fax (G3/G4)
- Small antenna





A FRIEND IN NEED IS A FRIEND  
INDEED, the saying goes; and truly,  
SAILOR is committed to being there  
for you should a problem arise. What  
is more, we want to make sure that  
you are always on safe ground, even  
when you are on the open sea. That is  
why we operate under the maxim:  
"SAILOR – When safety counts".

With more than 50 years of experi-  
ence in the market, SAILOR is a true

professional. We know that we have to  
earn the loyalty of our customers.  
That is why nearly 15% of our annual  
turnover is reinvested in research and  
development and more than one  
employee in ten is engaged in finding  
solutions to the challenges of tomor-  
row.

Today, SAILOR provides a well-known  
range of communications products that  
includes everything from radios for

the leisure market to equipment for  
fishing vessels and complete commu-  
nications solutions for the deep sea  
sector. The SAILOR brand has become  
synonymous with reliable and  
technologically superior radio equip-  
ment – and covers everything from  
basic VHF units to state-of-the-art  
satellite systems, AIS (Automatic  
Identification System) SSAS (Ship  
Security Alert System) and complete  
compact GMDSS solutions.



 **SAILOR**  
When safety counts