



# NAVTEX Transmitter

Safe and reliable broadcast of maritime safety information

## FEATURING FAIL-SAFE TRANSMISSION OF NAVTEX MESSAGES

The Futronic 1 KW NAVTEX Transmitter T507M-D MKII is designed to assure the transmission of all NAVTEX messages independent of network stability.

### MAIN FEATURES

- IP interface (IEEE 802,3)
- RF Output Power 50-1000 W into 50 Ohm
- Frequency 518 kHz / 490 kHz
- Frequency Stability +/-0,5 Hz
- MTBF > 50,000 hours
- NAVDAT
- Optional 2kW or 3kW output power

Comply with:  
ITU-R M.540-2, ITU-R M.625-3

IMO Revised NAVTEX Manual 2013,

EN 60950, EN 60215, EN 55022, EN 61000-3-2,  
EN 61000-3-3, EN 61000-4-2, EN 61000-4-2/-3/-  
4/-5/-6/ -11, EN 61000-6-2, EN 61000-6-4, ETS  
300 067

Transmitters and tuners are designed for rack mount and can be installed in separate racks or stacked together in one cabinet with glass doors.

For instance, the 600x600x1800 mm cabinet shown above contains all the equipment needed for a duplicated NAVTEX system with two transmitters; two antenna tuners and two power supply units.



# SPECIFICATIONS

**Power supply:** 85-264V 50–60 Hz single phase

**Power consumption:** Max 1.5 kW (6.5A at 230V)

**Cooling System:** Forced air-cooling

**Amb. temperature:** -20 to 55 °C to + 50

**Dimension:** 490 x 180 x 380 m (19"4HU)

**Warranty:**

The NAVTEX transmitter comes with a two-year warranty.

**Spurious Radiation:** Less than -53 dB).

**Modulation:** 304HF1 BCN (FSK +/- 85 Hz 100 Baud)

**Weight:** 10 kg

## NAVTEX transmitter station

The NAVTEX transmitter station consists of three main units:

- Remote controlled 1 kW NAVTEX transmitter
- Single-phase power supply for the transmitter
- Antenna tuner

The transmitter ensures messages can be sent even if a reverse power fault is observed. In case of too high reverse power, the forward power will be automatically reduced to protect the transmitter.

In case of a sudden short at the antenna, built-in circuitry will protect the transmitter against damage by immediately shutting down the transmission. During standby, the antenna is isolated from the transmitter and grounded.

## 3kW Automatic tuning unit



The output from the transmitter is connected to an antenna tuner in order to match the antenna impedance to the transmitter's 50-Ohm output impedance.

**Max input power** 3000 W

**VSWR** 1,1:1

**MTBF** >50,000 hours

**Amb. Temperature** -20 to 55 °C

**Weight** 29 kg

**Dimensions**

820 x 660 x 310 mm

**Tuning area**

Serial impedances between:

Real part  $2.5 < R < 30$  ohm

**Imaginary part:**  $-400 < J < -200$  ohm.