



HI-TECH COMMUNICATIONS
SINCE 1975

#### RTV-1124

# VHF COAST STATION FOR GMDSS

RTV-1124 is an all-in-one marine VHF transceiver supporting narrowband FM/PM mode (with channel spacing of 25 kHz or 12,5 kHz) designed to comply with the GMDSS requirements for safety and general communications. In addition to voice communication, the RTV-1124 includes DSC capability.

RTV-1124 has a form factor that enables installation into a standard 4-unit rack-mountable module named THU-1124. Each THU-1124 can contain up to 4 radios.

RTV-1124 can be provided with 100 W RF power option when combined with the RPA-1124 module, which can be fitted inside the THU-1124.

## **FEATURES**

#### **Full IP connectivity**

Wide range of implemented protocols: independent TCP/IP connections (remote client or server), SNMP, SNTP, TFTP for automatic firmware upgrade, HTTP for Web access and remote management.

#### VolP

Customizable VoIP session for audio streaming (including multicast) and full-IP remote control.

### Remote control via RS232 and RS422

Fully concurrent with IP and VoIP control.

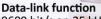
#### BITE

Self-monitoring of internal parameters and auto-recovering when fault condition disappears (non-volatile alarm log memory). Alarm signalling on TCP/IP connections, RS232 and RS422, SNMP traps.

#### Built-in DSC modem

Internal modem can be controlled through TCP/IP connections, RS232 and RS422.

BR



9600 bit/s on 25 kHz channels.

# Full-duplex capable

Voice encryption

600-Ohm dedicated analog input, output and recorder lines

#### **On-site operation**

Keyboard, display and microphone plug for quick on-site tests.

## Modularity

High modularity for easy maintenance.

#### Resilience

External structure in aluminium with high immunity to shock and vibrations.







# COUADO A CONTIRA

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#### GENERAL SPECIFICATIONS

Frequency range 156.025 ÷ 162.025 MHz Extended optional range 146 ÷ 174 MHz Channel spacing 25 kHz and 12.5 kHz PM (G3E), DSC (G2B) Modulation type Frequency accuracy Better than 1 ppm Switching time Rx/Tx 10 ms 19.6 ÷ 31.2 Vdc Power supply Dimensions (H x W x D) 173 x 96 x 277 mm

Weight 2.5 kg
Operating temperature - 20° ÷ + 55° C
Storage temperature - 40° ÷ + 70° C

Humidity 95% with T: +25° ÷ +55° C

### TRANSMITTER SPECIFICATIONS

 $\begin{array}{lll} \text{RF Power} & & \text{Adjustable } 1 \div 50 \text{ W} \\ & \pm 1.5 \text{ dB} \\ \text{Antenna port impedance} & & 50 \Omega \\ \text{Audio bandwidth} & & 300 \div 3000 \text{ Hz (25 kHz)} \\ \end{array}$ 

Audio bandwidth 300 ÷ 3000 Hz (25 kHz) 300 ÷ 2550 Hz (12.5 kHz) Spurious emissions < 0.25 μW (- 36 dBm)

AF distortion < 5 %

# RECEIVER SPECIFICATIONS

Sensitivity  $\leq$  0.25  $\mu$ V (-119 dBm) @ 20 dB SINAD dual antenna

Selectivity ≥ 70 dB

Protection against spurious response ≥ 80 dB

Protection against intermodulation ≥ 85 dB

Spurious emission ≤ 2 nW (-5)

Spurious emission ≤ 2 nW (-57 dBm)

Receiver SNR ≥ 40 dB

Audio bandwidth 300 ÷ 3000 Hz (25 kHz) 300 ÷ 2550 Hz (12.5 kHz)

AF distortion < 5 %

#### **STANDARDS**

EN 60950-1 (2006), EN 60950-1 (2006) / A11 (2009)

EN 60945 (2002)

EN 301 489-1 V1.6.1 (2005-09), EN 301 489-5 V1.3.1 (2002-08)

EN 301 929-1 V1.2.1 (2007-02) EN 301 929-2 V1.2.1 (2007-02) ITU-R M.493-14, ITU-R M.541-10



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