



75 Watt VHF Transceiver Type DCB 9140

The Danphone VHF base station transceiver type DCB 9140 operates in the marine VHF band.

Conforming to the EN 301929 and 301489 standards for GMDSS coast stations the transceiver meets the latest European ETSI standard and the American FCC Standard Rule Part 80 with respect to RF-performance and EMC and with quality, cost efficiency and flexibility utmost in mind.

As standard, the transceiver comes with built in DSC modem and single receiver. Optionally, the transceiver can be delivered with dual receivers, e.g. one for voice communications and the other for DSC.

The DCB9140 transceiver is of a compact rugged construction suitable for use in harsh environmental conditions. The track record proves MTBF better than 50,000 hours.

- ***Voice over IP***
- ***Remote-control over IP***
- ***GMDSS compliant***
- ***Built-in DSC modem***
- ***Choice of single or dual receivers***
- ***Option for local control and operation***
- ***Specifically designed and manufactured for 24/7 operation***
- ***Suitable for either small ports or large national coastal radio systems***
- ***Proved and tested for operation under harsh environments***



A 19" 3HU Sub Rack can contain two transceivers side by side. On the rear side each transceiver connects with LAN, antenna and power supply etc.

In addition to VoIP and remote-control over IP, the DCB9140 transceiver allows for local control and operation.

The transceiver also allows for the connection of external devices, such as display, handset and equipment for monitoring, for example environmental conditions.

Technical Specifications

General

Frequency Range

156 – 163 MHz
(up to 174 MHz upon request)

Operating Modes

Duplex, Semi-Duplex, Simplex

Duty Cycle

100%

Duplex Spacing

4.6 MHz

Number of Channels

55 International Marine Channels

Channel Spacing

12.5 and 25 kHz

Frequency Stability

1 ppm

Temperature Range

-20 to +55°C. Humidity up to 95%
non-condensing

TX Antenna Connection

50 Ohm

RX Antenna Connection

50 Ohm

Supply Voltage

13.2 VDC min, 18 VDC max

Current Consumption

Transmission < 15 A
Standby < 0.5 A

Duplexer

Optional

MTBF

> 50,000 Hours

Transmitter

RF Output Power

2-75 Watt adjustable

Spurious Emission

< -80 dB Relative Carrier

Adjacent Channel Power

Better than 70 dB

Modulation

+6 dB / Octave

Deviation

3 kHz nom, 5 kHz max

Modulation Distortion

Better than 3%

Hum and Noise

Better than 40 dB

Intermodulation

Better than 40 dB @ 30 dB
attenuation between transmitters

AF Input

245 mV Bal. 600 Ohm

Audio Bandwidth

300 Hz to 3 kHz

Receiver

RX Sensitivity

Better than -117 dBm / 20 dB SINAD
before duplexer. Better than -119
dBm / 12 dB SINAD before duplexer

Spurious Response

Better than 70 dB

Intermodulation Rejection

Better than 70 dB

Adjacent Channel Selectivity

Better than 70 dB

Blocking

Better than 90 dB

Co-channel Rejection

Better than 8 dB

Hum and Noise

Better than -40 dB

Distortion

Better than 3%

Audio Response

-6 dB / Octave

AF Output

245 mV Bal. 600 Ohm

Remote Settings

Channel Number

All international marine channels

Transmitter Power Level

2-75 Watt

Squelch Reference

Customer defined levels

RX Audio Balance

245 mV +/- 6 dB

Remote Readings

RSSI

0-40 dBμV

Transmitter Power Level

2-75 Watt

Reflected Power Level

1-40 Watt

Temperature Level

-30-80°C, 5°C tolerance

LF Out

245 mV for input of +/- 6 dB from
nominal deviation, 0.2 dB tolerance

LF In

For input levels of 245 mV +/- 6 dB to
give nominal deviation, 0.2 dB
tolerance

Supply Power Level

Better than 0.1 V tolerance

Interfaces

LAN Interface

For audio and remote control

RS 422 Interface

For local control and operation,
display, external alarm signaling, etc.
(optional)

Weight and Dimensions

Weight of Transceiver

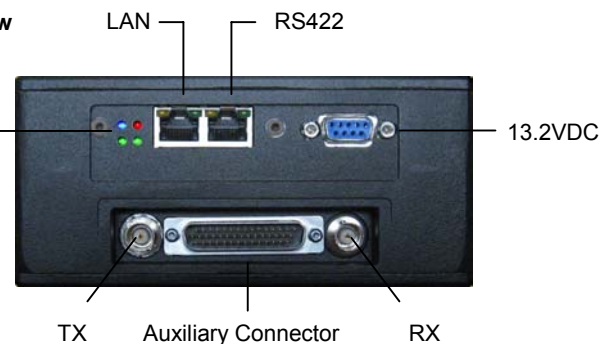
4.1 kg

Rack Mount Design

The transceiver comes in a 19" 3HU
Sub Rack, which can contain two
transceivers side by side

Transceiver Rear View

LED Indicators
Red: Power On
Blue: Health status
Green: Squelch RX1
Green: Squelch RX2



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