

# VHF Base Station Transceiver

## 75 Watt VHF Transceiver Type DCB 9140 IP

The Danphone VHF base station transceiver type DCB 9140 IP is specifically designed to operate in the marine VHF band. The latest feature include built-in Voice over IP and DSC modem controlled via LAN.

### KEY FEATURES

- GMDSS compliant
- Voice over IP
- Remote-control over IP
- Built-in DSC modem option
- Choice of single or dual receivers
- Specifically designed and manufactured for 24/7 operation
- Fully scalable from small ports to large national coastal radio systems
- Proven and tested for operation under harsh environments



The transceiver connects with LAN, antenna and power supply.

In addition to VoIP and remote-control over IP, the DCB9140 transceiver allows for local control via optional display and handset.

# TECHNICAL SPECIFICATIONS

Nato Stock number: **5825-22-632-0324**

Danphone item number: **152.2024.001**

## CONNECTIONS

- LAN
- RS422
- 13.2V<sub>DC</sub>
- Auxiliary connector
- TX antenna
- RX antenna

## LED INDICATORS

- Green: power and health
- Red: TX
- Green: Sq. RX2
- Green: Sq. RX1



GENERAL	TRANSMITTER	RECEIVER	REMOTE SETTINGS
<b>Frequency range</b> 156 – 163 MHz	<b>RF output power</b> 1-75 Watt adjustable	<b>RX sensitivity</b> Better than -117 dBm / 20 dB SINAD before duplexer. Better than -119 dBm / 12 dB SINAD before duplexer	<b>Channels</b> All international marine channels
<b>Operating modes</b> Duplex, Semi-Duplex, Simplex	<b>Spurious emission</b> < -85 dB Relative Carrier	<b>Spurious response</b> Better than 80 dB	<b>Transmitter power level</b> 1–75 Watt
<b>Duty cycle</b> 100%	<b>Adjacent channel power</b> Better than 80 dB	<b>Intermodulation rejection</b> Better than 85 dB	<b>Squelch reference</b> Customer defined levels
<b>Duplex spacing</b> 4.6 MHz	<b>Modulation</b> +6 dB / Octave	<b>Adjacent channel selectivity</b> Better than 80 dB	<b>RX audio balance</b> 245 mV +/- 6 dB
<b>Number of channels</b> 55 International marine channels	<b>Deviation</b> 3 kHz nom, 5 kHz max	<b>Blocking</b> Better than 90 dB	REMOTE READINGS
<b>Channel spacing</b> 12.5 and 25 kHz	<b>Distortion</b> Better than 3%	<b>Co-channel rejection</b> Better than 10 dB	<b>Supply power level</b> 0-18V ±0.1V
<b>Frequency stability</b> 0.5 ppm	<b>Hum and noise</b> Better than 40 dB	<b>Hum and noise</b> Better than -40 dB	<b>Transmitter power level</b> 1–75 Watt
<b>Supply voltage</b> 13.2V <sub>DC</sub> min, 16V <sub>DC</sub> max	<b>Intermodulation</b> Better than 40 dB at 30 dB attenuation between transmitters	<b>Distortion</b> Better than 3%	<b>Reflected power level</b> 1-20 Watt
<b>Current consumption</b> Transmission < 15A (75 Watt) Standby < 0.5A	<b>TX antenna connection</b> 50 Ω	<b>RX Antenna connection</b> 50 Ω	<b>Temperature level</b> -30 - +80°C, 5°C tolerance
<b>Duplexer</b> Optional	INTERFACE	DIMENSIONS	<b>RSSI</b> 0-40 dBμV
<b>MTBF</b> > 50,000 hours	<b>LAN interface</b> For audio and remote control	<b>Dimensions</b> 127x215x260 mm	
<b>Operating temperature</b> -20 to +55°C, humidity up to 95% non-condensing	<b>RS 422 interface</b> For local control and operation, display, external alarm signaling, etc. (optional)	<b>Weight of the transceiver</b> 4.1 kg	
<b>Compliance</b> EN 301 929 V2.1.1 VHF IEC EN 60950-1 Safety	<b>VoIP</b> Danphone multicast protocol G.711 & G.723.1 EURO CAE ED 137/C	<b>Rack mount design</b> Two transceivers can be mounted side-by-side in a 19" 3HU Sub Rack	
	<b>SNMP</b> For control og monitoring	<b>Power supply</b> 13.2 - 16V <sub>DC</sub> , < 15A	