

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_{DC}
- 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
Frequency range 156 – 163 MHz (Up to 174 MHz upon request)	RF output power 2-75 Watt adjustable	RX sensitivity Typically, better than -119 dBm / 12 dB SINAD before duplexer. Better than -117 dBm / 20 dB SINAD before duplexer	Channels All international marine channels Including ITU Radio Regulations Appendix 18
Operating modes Duplex, Semi-Duplex, Simplex	Spurious emission < -85 dB Relative Carrier	Spurious response Better than 80 dB	Transmitter power level 1–75 Watt
Duty cycle 100%	Adjacent channel power Better than 80 dB	Intermodulation rejection Better than 85 dB	Squelch reference Customer defined levels
Duplex spacing 4.6 MHz	Modulation +6 dB / Octave	Adjacent channel selectivity Better than 80 dB	RX audio balance 245 mV +/- 6 dB
Number of channels 55 International marine channels	Deviation 3 kHz nom, 5 kHz max	Blocking Better than 95 dB μ V (emf)	REMOTE READINGS
Channel spacing 12.5 and 25 kHz	Distortion Better than 3%	Co-channel rejection Better than 10 dB	Supply power level 0-18V \pm 0.1V
Frequency stability 0.5 ppm	Hum and noise Better than 40 dB	Hum and noise Better than -40 dB	Transmitter power level 2–75 Watt
Supply voltage 13.2V _{DC} min, 16V _{DC} max < 15A Over voltage protection max 32 V DC	Intermodulation Better than 40 dB at 30 dB attenuation between transmitters	Distortion Better than 3%	Reflected power level 1–20 Watt
Current consumption Transmission < 15A (75 Watt) Standby < 0.5A	TX antenna connection 50 Ω	RX Antenna connection 50 Ω	Temperature level -30 - +80°C, 5°C tolerance
Duplexer Optional	INTERFACE	DIMENSIONS	RSSI 0-40 dB μ V
MTBF > 50,000 hours	LAN interface For audio and remote control IPV4 (upgradeable to IPV6 via software)	Dimensions 127x215x260 mm	Transmitter Shutdown for SWR > 3
Operating temperature -20 to +55°C, humidity up to 95% non-condensing	RS 422 interface For local control and operation, display, external alarm signaling, etc. (optional)	Weight of the transceiver 4.1 kg	Over Temperature Protection, Derate Output Power 0–100% @ T-case 70-90°C
Compliance EN 301 929 V2.1.1 VHF IEC EN 60950-1 Safety RoHS –2011/65/EU	VoIP Danphone multicast protocol G.711 & G.723.1 EURO CAE ED 137/C	Rack mount design Two transceivers can be mounted side-by-side in a 19" 3HU Sub Rack	
	SNMP For control and monitoring	Power Supply 13.2–16Vdc, < 15A	