

SEA 235

150W HF/SSB Digital Radiotelephone



The SEA 235 is one of the first MF/HF SSB radiotelephones with Digital Signal Processing (DSP) as its fundamental architecture.

- DSP end-user benefits include:
 - More talk power than radiotelephones with equal power ratings
 - Virtually error free transition for voice and data
 - Clear audio with enhanced clarity and reception
 - Receives future enhancements and improvements through software upgrades
 - Flexible application filters configured through software
 - Increased reliability over analog filters
 - Email and Data capability
- Amateur bands with HAM/MARS operations
- Frequently used channels are pre-programmed from factory using alpha-numeric names for easy recall
- True AM receiver for clear undistorted reception
- Large easy to read LCD & backlit silicone keypad
- Optional 2350 Remote Control Heads (up to 3)
- Interfaces with SEA 1612C automatic antenna tuner
- Interfaces to PACTOR II and ALE Controllers

The SEA 235 is an MF/HF SSB radiotelephone designed and built on a fully digital platform. This revolutionary radio is unequalled in performance, price, reliability, and flexibility for use in numerous special applications.

Digital architecture makes the SEA 235 more reliable. It is also smaller and lighter than most MF/HF Single Side Band radios in the Marine marketplace.

The SEA 235 design has proven to be extremely reliable and capable of sustaining high performance communications in harsh environments and under extreme signal conditions.

Flexible SEABUSS interconnection supports multiple devices, balanced/unbalanced audio lines, and simplifies PACTOR and ALE controller interfaces.

SEA has consistently provided competitively priced HF/MF SSB radiotelephones for more than 30 years. SEA MF/HF SSB radiotelephones have won numerous awards for excellence.

SEA COM CORP has a worldwide service network to support all of its products, ensuring backup support almost anywhere in the world your ship is operating.

To learn more about this model or other SEA products, contact your local Marine Electronics Dealer or call SEA COM CORP at (425) 771-2182, or email sales@seacomcorp.com.

SEA 235 Specifications

GENERAL

Compliance:

FCC Parts 80, 87, 90

FCC ID:

BZ6SEA235

Frequency Range:

Tx: 1.6 to 30 MHz

Rx: .49 to 30 MHz

Frequency Resolution:

Tx: 100 Hz

Rx: 10 Hz

Frequency Stability:

± 10 Hz (-30° +60°C)

Operating Modes:

J3E (USB) LSB, H3E, J2B (AFSK) R3E

Supply Voltages:

13.6 VDC ± 15%

(11.6 – 15.6 V)

Current Drain:

Tx 17 Amps (two-tone)

Tx 11 Amps (voice)

Rx 1 Amp (stand-by)

Rx 1.5 Amps (full-audio)

Operating Temperature Range:

-30°C to 60°C

Antenna Impedance:

50 ohms

Channels:

1176 Total

200 Programmable

242 ITU SSB Duplex

72 ITU SSB Simplex

662 ITU FSK Duplex

Direct Entry

Scan Channels:

200

Display:

LCD

3.2" x 1.85" (W x H)

(81.2mm x 46.9mm)

Metering:

S-Meter

Computer I/O:

RS-232 Serial

RECEIVER

Frequency Range:

490 KHz to 30 MHz

Frequency Resolution:

10 Hz

Intermediate

Frequencies:

45 MHz, 455 KHz

Sensitivity:

≤ 1.0 uV for 12 dB SINAD

Adjacent Channel

Selectivity:

>60db at -1 KHz

Blocking:

At max. Sensitivity: Better

than 70 dB at +60dB/uV:

Better than 100 dB

Cross Modulation:

Better than 80 dB

Spurious Response:

Better than 70 dB

Spurious Emissions:

Less than 1 nW

Intermodulation:

-80 dB

AGC:

J3E, fast attack, slow

release, ≤ 10 dB audio level

change from 10 uV to 100

mV input

Clarifier:

+/-200 Hz in 10 Hz steps

Squelch:

Voice controlled, opens at

SINAD >5dB

Audio Output:

4 Watt @ 4 ohms, less than

10% distortion

TRANSMITTER

Output Power:

150 Watt into 50 ohms

Power Reduction:

-3dB/-6dB from PEP

Intermodulation:

Better than -34 dB

below PEP

Spurious Emissions:

Better than -65 dB

below PEP

Carrier Suppression:

Better than 50 dB

below PEP

Undesired Sideband

Suppression:

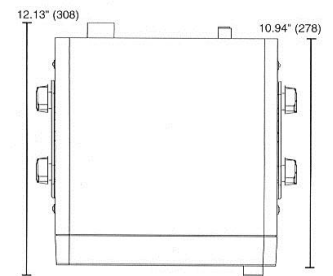
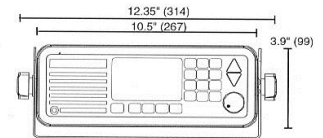
Better than 50 dB

below PEP

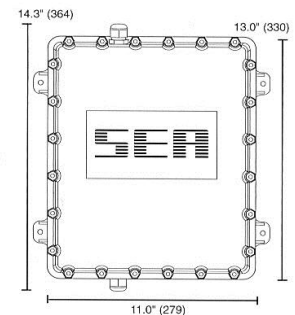
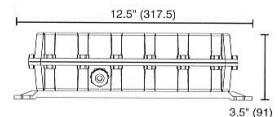
AF Bandwidth:

400 – 2500 Hz at -6 dB

Dimensions in. (mm)



Radio
9.1 lbs (4 kg.)



Antenna Tuner
4.5 lbs (2 kg.)

SEA COM CORPORATION

7030 - 220th S.W., Mountlake Terrace, Washington 98043, 425.771.2182 Fax: 425.771.2650 www.seacomcorp.com