

# SPECIFICATIONS

## [General]

<b>Semiconductors</b>	ICs	12
	FETs	15
	Transistors	105
	Diodes	126
<b>Frequency range</b>	144.0 to 146.0 MHz	
<b>Frequency synthesizer</b>	Digital control, phase locked VCO	
<b>Mode</b>	SSB (A3j), FM (F3), CW (A1)	
<b>Frequency stability</b>	Within $\pm 500\text{Hz}$ during the first hour after 1 minute of warm up, and within 50Hz any 30 minutes thereafter at $25^\circ\text{C}$ (constant).	
<b>Power requirement</b>	13.8V DC $\pm 15\%$	
<b>Grounding</b>	Negative	
<b>Operating temperature</b>	-20°C to +50°C	
<b>Current drain</b>	0.7A in receive mode with no input signal 6.0A in HI transmit mode (Approx.) 3.5A in LOW transmit mode (Approx.) Less than 3.0mA for memory back up	
<b>Dimensions</b>	170mm (6-11/16") wide 68mm (2-11/16") high 241mm (9-1/2") deep (projections not included)	
<b>Weight</b>	2.4kg (5.5lbs)	

## [Transmitter Section]

<b>RF output power (at 13.8V DC, 50Ω load)</b>	HI (SSB, FM, CW) 25W min.
	Low (FM, CW) 5W approx.
<b>Modulation</b>	FM Variable reactance direct shift SSB Balanced modulation
<b>Tone frequency</b>	1750Hz
<b>Frequency tolerance</b>	SSB, CW Less than $\pm 10 \times 10^{-6}$ FM Less than $\pm 20 \times 10^{-6}$
<b>Spurious radiation</b>	HI Less than -60dB LOW Less than -53dB
<b>Carrier suppression</b>	Better than 40dB
<b>Unwanted side band suppression</b>	Better than 40dB
<b>Maximum frequency deviation (FM)</b>	$\pm 5\text{kHz}$

**Microphone** Dynamic microphone with PTT switch, 500Ω

## [Receiver Section]

<b>Circuitry</b>	FM Double conversion superheterodyne SSB, CW Single conversion superheterodyne
<b>Intermediate frequency</b>	1st IF 10.695MHz 2nd IF (FM) 455kHz
<b>Receiver sensitivity</b>	FM Better than $0.5\mu\text{V}$ for 30dB S/N Better than $0.2\mu\text{V}$ for 12dB SINAD SSB, CW $0.2\mu\text{V}$ for 10dB S/N
<b>Receiver selectivity</b>	FM More than 14kHz (-6dB) Less than 30kHz (-60dB) SSB, CW More than 2.2kHz (-6dB) Less than 4.8kHz (-60dB)
<b>Spurious interference</b>	Better than 70dB
<b>Squelch sensitivity</b>	$0.16\mu\text{V}$ (Threshold)
<b>Auto scan stop level</b>	Less than $0.2\mu\text{V}$ (Threshold)
<b>Audio output</b>	More than 2.0 watts across 8ohms load (10% dist.)

**Note:** Circuit and ratings are subject to change without notice due to developments in technology.