General

Rx Frequency Range: 100 kHz - 30 MHz

Tx Frequency Ranges: 160 - 10m (Amateur bands only) **Frequency Stability**: ±0.5 ppm (after 1 min. @ 25 °C)

±0.25 ppm (after 1 min. @ 25 °C, w/TCXO-6)

Operating Temperature Range: -10 °C ~ +50 °C

Emission Modes: LSB, USB, CW, FSK, AFSK, AM, FM

Frequency Steps: 0.625/1.25/2.5/5/10 Hz for SSB,CW, RTTY & Packet;

100 Hz for AM and FM

Antenna Impedance: 50 Ohms, unbalanced

16.6 - 150 Ohms, unbalanced (Tuner ON, TX only)

Power Consumption(@13.8 V DC): Rx (no signal) 2.3 A

Rx (signal) 2.7 A Tx (100 W) 20 A

Supply Voltage: 13.8 VDC/100-120 VAC 50-60 Hz/200-240 VAC 50-60 Hz

Dimensions (WHD): 410 x 135 x 347 mm (16 x 5.3 x 13.7 inch)

Weight (approx.): 15 kg. (33 lbs)

Transmitter

Power Output: Adjustable up to 100 watts (25 watts AM carrier),

Class A mode (SSB): 25 watts maximum

Duty Cycle: 100% @ 50 watts, 50% @ 100 watts (FM & RTTY, 3-minute Tx)

Modulation Types: SSB: J3E Balanced, AM: A3E Low-level (early stage),

FM: F3E Variable reactance, AFSK: J1D, J2D Audio frequency shift keying

Maximum FM Deviation: ± 2.5 kHz

FSK Shift Frequencies: 170, 425, and 850 Hz **Packet Shift Frequencies**: 200 and 1000 Hz

Harmonic Radiation: Better than -60 dB (Typical)

SSB Carrier Suppression: At least 40 dB below peak output

Undesired Sideband Suppression: At least 55 dB below peak output

Audio Response (SSB): Not more than -6 dB from 400 to 2600 Hz 3rd-order IMD: -31 dB @ 100 watts PEP, or better

Class A mode: -40 dB @ 25 watts PEP (Typical)

Microphone Impedance: 500 to 600 Ohms

Receiver

Circuit Type: Quad-conversion superheterodyne (triple conversion for FM)

Intermediate Frequencies: Main Rx; 70.455 MHz/8.215 MHz/455 kHz, Sub Rx; 47.21 MHz/455 kHz

AM (6 kHz) $13 \mu V$ $2 \mu V$ $0.10 \mu V$ FM - $0.5 \mu V$

(with preamp on, IDBT on, SSB/CW/AM for 10 dB S/N, FM for 12 dB SINAD,

 $0 dB\mu = 1 \mu V$

Selectivity (-6/-60 dB): Band Width Modes Minimum -6 dB BW Maximum -60 dB BW

2.4 kHz all except FM 2.2 kHz 4.2 kHz 1.8 kHz 3.6 kHz 2.0 kHz all except FM 500 Hz CW/RTTY/Packet 500 Hz 1.8 kHz 250 Hz CW/RTTY/Packet 250 Hz 700 Hz 4 kHz 14 kHz AM (Wide)

AM (Wide) 4 kHz 14 kHz FM 8 kHz 19 kHz

IF Rejection (1.8 ~ 30 MHz): 80 dB or better (Main Rx), 60 dB or better (Sub Rx) **Image Rejection** (1.8 ~ 30 MHz): 80 dB or better (Main), 50 dB or better (Sub)

Maximum Audio Output: 2.0 W into 4 Ohms with <10% THD

Audio Output Impedance: 4 to 8 Ohms

Specifications are subject to change, in the interest of technical improvement, without notice or obligation.