

K3 Specifications*

GENERAL

Frequency Range: Main and Sub Receiver: 500 kHz - 30 MHz, 48-54 MHz. (Reduced sensitivity in region of 8.215 MHz IF. KBPF3 required for general-coverage receive.) Transmitter: Amateur bands between 1.8 and 54 MHz. (Transmit limits vary by country.)

Tuning Step Sizes: 1, 10, 20, and 50 Hz; per-mode coarse tuning of 1, 2.5, 5, 10 kHz, or user-selected rate. Direct keypad frequency entry in either MHz or kHz.

Memories: 100 general purpose, plus 4 per-band scratchpad memories (M1-M4).

Frequency Stability: +/- 5 ppm 0-50 C TCXO standard; +/- 0.5 ppm TCXO optional.

Antenna Impedance: 50 ohms nominal.

Antenna Connectors: SO-239 (2nd SO-239 antenna jack supplied with KAT3 ATU). BNC for RX antenna in/out (KXV3 Option).

Modes: USB, LSB, AM, FM, CW, and DATA. In DATA mode: Direct FSK, AFSK, or PSK31. Built in PSK31, RTTY, and CW text decode/display.

VFOs: Dual VFOs (A and B) with separate weighted tuning knobs.

Remote Control Port: EIA-232 standard DE-9F plus USB adapter option. Full control of all radio functions.

Audio I/O: PC line-level isolated TX/RX audio interface (stereo outputs); front and rear stereo headphone jacks; stereo speaker jacks.

Low Level Transverter Interface: 0 dBm typ.; BNC connectors (KXV3 Option).

Buffered IF output: BNC connector (KXV3 Option).

Other I/O: Key/Keyer/Computer, Paddle, PTT In, and KEY Out. Band information output via binary interface and AUXBUS on ACC connector.

Supply Voltage/current: 13.8 V nominal (11 V min, 15 V max). 17-22 Amps typical in TX (100W). 0.9A typical RX (subreceiver off).

Weight: 8.5 lbs max. (K3/100 with ATU and Sub Rx installed.)

RECEIVERS (Main and Sub)

Sensitivity: -136 dBm or better (typical), 500Hz b/w.

IMD3 Dynamic Range (400 Hz 8-pole filter):**
>100 dB at 5, 10, and 20 kHz spacing

Blocking Dynamic Range (400 Hz 8-pole filter):
>140 dB at 5, 10, and 20 kHz spacing

Image Rejection: > 70 dB

IF Rejection: > 70 dB

S-Meter: Nominally S9 = 50 uV, preamp on; user-adjustable.

Noise Blanker: Adjustable, multi-threshold, multi-width hardware blanker plus DSP blanker.

8-Band RX graphic EQ: +/- 16 dB/octave.

IF Shift/Width & Lo/High Cut adjustable filtering.

TRANSMITTER

Output Power: 200 mW – 100 W, ALC controlled (Reduced power on AM.)

Duty Cycle: CW and SSB modes 100%. (RTTY/data also likely to be 100%. Easily handles 10-min. 100W key-down at 25 C ambient.)

True RF Speech Processor: Adjustable compression and level.

8-Band TX audio graphic EQ: +/- 16 dB/octave.

SSB TX Bandwidth: 4 kHz max. (> 2.8 kHz requires 6 kHz INRAD AM filter and TX EQ adjustment).

TX speech Monitor: Monitors after DSP filtering and processing.

VOX: DSP-controlled, adjustable threshold, delay, and anti-VOX.

Full and Semi CW Break-In: Adjustable delay. Diode T/R Switching.

Adjustable CW Rise/Fall Time: 2 to 6 ms.

SSB Carrier Suppression: > 50 dB.

Harmonic and Spurious: > 50 dB below Carrier (100W)

CW Offset/Sidetone: 300-1000 Hz, adjustable.

Mic: Front 8 pin microphone connector, rear 3.5 mm microphone connector, wide mic gain adjustment range. PTT In (RCA jack) usable in all modes.

* Preliminary; subject to Change

** Other filters will be similar; final specs TBA.