



FLEX-1500

160-6M Transceiver

Overview

- Software Defined Radio Technology
- Full HF-6m coverage
- 5 Watts nominal PEP
- 48kHz real-time receive bandwidth
- >85db of Two-Tone 3rd order dynamic range
- Full featured transverter interface including external 10MHz reference
- 2.4"H x 4"W x 7"D
- Only 1.5 Lbs!

The FLEX-1500™ brings FlexRadio Systems' proven software defined radio technology to the ultra-compact form factor. Weighing in at only 1.5 pounds and about the size of a paperback book, the FLEX-1500 delivers a fully featured HF-6M transceiver with 5 watts PEP output that's perfect for the bench top, backyard, or back country. High performance A/D and D/A converter technology enable great close-in receiver performance and excellent SSB, CW, and digital transmission modes for ultra-portable HF operation. The FLEX-1500 offers greater than 85 dB Two-Tone 3rd order dynamic range at 2 kHz spacing placing it in the same category as radios costing many times as much. All this plus a full-featured transverter interface make the FLEX-1500 the perfect radio for **Excitement to Go!**™. FlexRadio Systems is a leader in Software Defined Radio (SDR) technology. Our high-performance, PowerSDR™ software is the gold standard in SDR radio software.

www.flexradio.com

FlexRadio Systems[®]
Software Defined Radios

FLEX-1500

General Specifications:

Rx Frequency Range :

490 kHz - 54 MHz (operating below 490 kHz requires external, customer provided filters to eliminate images)
160 - 6 m (specified performance in Amateur bands only)

Frequency Stability :

±2.5 ppm TCXO std. 32 °F to 122 °F (0 °C to +50 °C)
Optional input for external 10MHz standard reference

Operating Temperature Range :

14 °F to 122 °F (-10 °C to +50 °C)

Emission Modes :

A1A (CW), A3E (AM), J3E (LSB,USB), F3E (FM),
F1B** (RTTY), F1D** (PACKET), F2D**(PACKET)

Frequency Steps :

1Hz minimum

Antenna Impedance :

50 Ohms nominal, unbalanced
Rx Optimal

Power Consumption :

Rx and transverter 400mA (typ.); Tx (5 W PEP)
1.8A(max.)

Supply Voltage :

DC: DC 11-15 V Negative Ground
All Specifications At 13.8VDC
RX Only/Transverter Mode: DC 8-15V

Maximum Interconnect Cable Length :

Complies with USB 2.0 (Not to exceed 5 Meters)

CE Compliance Cable Requirements :

1 snap on ferrite bead on USB cable (supplied)
Bead to be located adjacent to radio connection

Dimensions :

(WxHxD): 2.4"H x 4"W x 7"D
Weight: 1.5 Lbs (0.68 kg)

**Requires third party software

Receiver Specifications:

MDS :

MDS (typ) @ 500Hz BW			
Preamp OFF	+20dB	+30dB	
14MHz	-116dBm	-127dBm	-
50MHz	-	-	-138dBm

IP3 :

+21 dBm @ 14 MHz with preamp off at 2 kHz or less tone spacing (S5 IM3 method)

Selectivity :

(-6/-60 dB):
CW 500 Hz -6/-60 dB: 500/640
SSB 2.4 kHz -6/-60 dB: 2.39/2.54
AM 6.6 kHz -6/-60 dB: 6.60/6.74
(at 48 ksps/2048 Buffer Length)

Image Rejection

>100 dB with Wide Band Image Rejection active

Transmitter Specifications:

Transmitter Frequency Range :

160 - 6 m (Amateur bands only)

Power Output :

5 watts nominal PEP CW and SSB at 13.8VDC input voltage
5 Watts nominal PEP AM = 3.3 Watts nominal AM

Emission Modes Types :

A1A (CWU, CWL), J3E (USB, LSB), A3E (AM),
F3E(FM), DIGITAL(DIGU, DIGL)

Harmonic Radiation :

Better than -48 dB (160 - 10m Amateur bands)
Better than -60 dB (6m Amateur band)

SSB Carrier Suppression :

At least 55 dB below peak output

Undesired Sideband Suppression :

At least 55 dB below peak output

Audio Response (SSB) :

Flat Response 20 Hz to 20 kHz,
3-band or 10-band Software Equalizer

3rd-order IMD :

Better than -33 dB below PEP @14.2MHz 5 watts PEP

Microphone Impedance :

600 Ohms

FlexWire Audio Line in and Line out Impedance:

1000 Ohms

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The FLEX-1500 operation requires connection to a PC running Windows VISTA, or Windows 7 or later. PC and monitor not included.

 **FlexRadio Systems**[®]
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