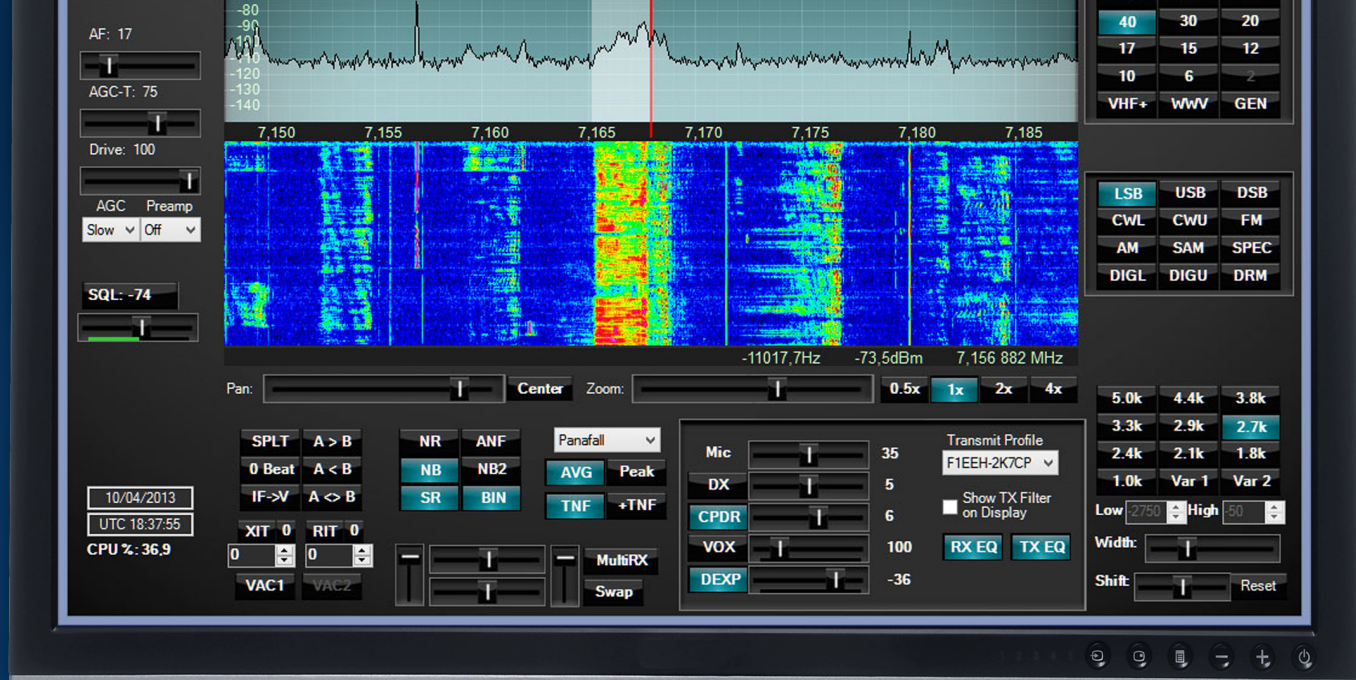




FLEX-3000

160-6M Transceiver

Overview

- Software Defined Radio Technology
- Full HF-6m coverage
- 100 Watt class radio
- 96kHz real-time receive bandwidth
- >93db of Two-Tone 3rd order dynamic range
- Built in Automatic Antenna Tuner
- 12.2" X 2.1" X 12.4"
- Only 7 lbs!

The FLEX-3000 is a third generation software defined radio from FlexRadio Systems. It is a low cost/high performing HF-6M transceiver built with portability in mind. The FLEX-3000 form factor is designed to fit in a case along with a laptop and a power supply for mobile use or sit under a monitor at a base station. The FLEX-3000 utilizes high performance 24-bit A/D and D/A converters enabling superior close-in receiver performance. The FLEX-3000 offers greater than 93 dB Two-Tone 3rd order dynamic range at 2kHz spacing making it a higher performing radio than those costing two and three times as much. The small size makes it great for **Excitement Anywhere!**[™]. 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

FlexRadio Systems 4616 W. Howard Lane, Suite 1-150 Austin, Texas 78728 +1-512-535-4713, Fax 512-233-5143

FLEX-3000

General Specifications:

Rx Frequency Range :

10 kHz - 65 MHz (operating below 1.8 MHz 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 ±0.5 ppm TCXO

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 :

Antenna input: 50 Ohms nominal, unbalanced
ATU tuning range: Minimum 10-300 ohms

Power Consumption :

Rx 1.5A (typ.); Tx (100 W) 25A(max.)

Supply Voltage :

DC: DC 11-15 V Negative Ground
Transmitter output specified at 13.8VDC

Maximum Interconnect Cable Length :

Firewire - must comply with IEEE 1394a standard
No restriction on DC power cable within voltage tolerance limits under load.

CE Compliance Cable Requirements :

1 snap on ferrite bead on DC power cable (supplied)
2 snap on ferrite beads on FireWire cable (supplied)
1 snap on ferrite bead on FlexWire cable
All beads to be located adjacent to rear panel of radio.

Dimensions :

(WxHxD):
12.2" X 2.1" X 12.4" (23.5cm x 22.1 cm x 31.6 cm)
Weight: (approx.): 7 lbs (3.2 kg)

**Requires third party software

Receiver Specifications:

MDS :

MDS (typ) @ 14 MHz, 500Hz BW
Preamp OFF PRE1 PRE2
-121dBm -126dBm -135dBm

IP3 :

+28 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

Transmitter Specifications:

Transmitter Frequency Range :

160 - 6 m (Amateur bands only)

Power Output :

1 - 100 watts nominal PEP CW and SSB at 13.8VDC
input voltage
25 watts nominal AM carrier

Emission Modes Types :

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

Harmonic Radiation :

Better than −55 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 100 watts
PEP

Microphone Impedance :

600 Ohms

www.flexradio.com

© Copyright 2014 FlexRadio Systems. All Rights Reserved. FLEX-3000 is a trademark of FlexRadio Systems. Specifications are subject to change without notice or obligation, and specifications are guaranteed only within the amateur radio bands. Rev 006 3/23/2014
The FLEX-3000 operation requires connection to a PC running Windows VISTA, or Windows 7 or later. PC and monitor not included.

 **FlexRadio Systems®**
Software Defined Radios

FlexRadio Systems 4616 W. Howard Lane, Suite 1-150 Austin, Texas 78728 +1-512-535-4713, Fax 512-233-5143