

# MICOM-2ET-RDP

**HF-SSB Rapid deployment package with  
embedded Automatic link Establishment (ALE)  
125 watt PEP/Average 1.6-30 MHz**



## Features

**M**ICOM-2ET-RDP is an advanced Transportable Digital Signal Processing communication system, intended for very wide range radio communications. It provides, Voice, Data, Fax and E-mail solutions with a high degree of sophistication, signal quality and reliability, while being very simple to operate.

MICOM-2ET-RDP is a self-contained communication system, the radio, AC power supply, ATU or tactical wide band antenna, cables and grounding are housed into a rugged compact suitcase small enough to fit under an airline seat. The Automatic Link Establishment-ALE (per FED-STD 1045 and MIL-STD 188/141A) is a STANDARD FEATURE of every MICOM-ET-RDP.

- Self contained communications system
- Ruggedized Transportable 125 watt PEP/Average
- Front panel programming
- Enhanced features for better communications
- Detachable control head
- Detachable ATU for enhanced performance & safety
- Auto sensing AC power supply with automatic AC/DC changeover
- Comforms to MIL-STD 810 and EIA Specifications
- ALE per FED-STD-1045 and MIL-STD-188/141A
- High MTBF
- Complies with ISO 9001 Requirements
- Security access code
- Various antenna system options
- Voice activated digital squelch
- Digital noise blanking and clarifier
- Multi-language Liquid Crystal Display
- BITE (Built-in Test Equipment)
- Meets FCC and EMC standards
- Selectable front-end Attenuator
- Adaptable internal configuration option
- Excellent frequency stability
- Selectable Power Output
- Variable notch filter
- Sub-octave pre-selector



Communications

MICOM-2ET-RDP

# MICOM-2ET-RDP

**HF-SSB Rapid deployment package with embedded Automatic link Establishment (ALE) 125 watt PEP/Average 1.6-30 MHz**

GENERAL	
Model Number:	M81AMN0KV5-K with optional, G580 ATU system or G581 Wide band Ant. System
Frequency Range:	1.6 MHz Tx, 100 kHz-30 MHz Rx
Number of Channels:	200; User programmable; Simplex or Half Duplex
Scanning:	5 groups with up to 100 channels per group
Frequency Stability:	0.6 PPM, (0.1 PPM optional)
Frequency Drift (Aging):	1 PPM per year
Synthesizer Lock Time:	10 msec max.
Frequency Resolution:	10 Hz
Audio Bandwidths @ -6dB:	Voice: 350 to 2700 Hz CW: 650 to 1150 Hz Low speed data: 1450 to 1950 Hz High speed data*: 350 to 3300 Hz
Operating Temp. Range:	-30° to +60°C
Humidity:	95% @ 50°C
Operating Voltage:	Ac: 85-132V and 170-265V, 47-440Hz (Auto-sensing) DC: 13.8V ±20% Neg. Ground
ALE:	Per FED-STD 1045 and MIL-STD 188/141A
<b>Current Consumption:</b>	
XMIT Voice :	120V AC: 2 Amp, 240V AC: 1 Amp, 13.8V DC: 14 Amp
XMIT 2 Tone:	120V AC: 3 Amp, 240V AC: 1.5 Amp, 13.8V DC: 23 Amp
XMIT Single Tone:	120V AC: 5 Amp, 240V AC: 2.5 Amp, 13.8V DC: 28 Amp
Receiver:	120V AC: 1 Amp, 240V AC: 0.5 Amp, 13.8V DC: full audio 3 Amp , squelched: 2.2 Amp

\*Optional, for authorized users only.

TRANSMITTER	
Output Power:	125W P.E.P. and average
Reduced Power Levels:	25W, 62W, 100W (RSS Programmable)
Audio Bandwidth Ripple:	3 dB
Intermodulation:	-31 dB/P.E.P. (-35 dB/P.E.P. Typical. Note 1)
Harmonic Emissions:	-64 dB/P.E.P. (-70 dB/P.E.P. Typical. Note 1)
Spurious Emissions:	-64 dB/P.E.P. (-70 dB/P.E.P. Typical. Note 1)
Carrier Suppression:	-50 dB/P.E.P.
Undesired Sideband Suppression:	-55 dB/P.E.P.
Audio Distortion:	2.5%
1/2 Power Mic. Sensitivity:	25 to 125 mV (RMS)/600 ohms
Hum & Ripple:	-50 dB
Inband Noise:	-60 dB (30 Hz BW)
Tx/Rx Switching Time:	10 msec
Tx Tuning Adjustments:	None

Note 1: Values noted as typical are valid over 90% or more of the frequency range.

RECEIVER	
Sensitivity (SINAD) SSB: (Voice)	0.5 $\mu$ v for 10 dB SINAD (0.3 $\mu$ v Typical. Note 1) 0.1-1.6 MHz - reduced performance
1/2 Rated Power Sensitivity:	1 $\mu$ v for 2.5W audio @ speaker
Selectivity:	-6 dB @ 350 to 2700 Hz -60 dB @ -1 kHz, +4 kHz
Image Rejection:	-80 dB
IF Rejection:	-85 dB
Undesired Sideband Rejection:	-55 dB @ -1 kHz
Spurious Rejection:	-80 dB
Intermodulation Rejection:	-80 dB
Cross Modulation Rejection:	-100 dB @ 100 kHz
Desensitization:	-100 dB @ 100 kHz
Reciprocal Mixing:	-100 dB @ 100 kHz
Audio Power @ Speaker:	5W @ 2.5% distortion
RGC Range:	5 $\mu$ v 1V (2 dB change in output level)
RGC Time Constant: Voice:	Attack time 10 msec. Release time 1500 msec
Data:	Attack time 10 msec. Release time 10 msec
Squelch:	Constant SINAD (digital)
Clarifier Range:	± 200 Hz in 10 Hz steps
Receiver Tuning Adjustments:	None
Preselector Sections:	Sub-octave (1.6 MHz to 30 MHz range)
Antenna Input Protection:	20 kV maximum transient, 100V RMS for 2 minutes
DIMENSIONS & WEIGHT	
Size (HxWxD): 341 x 507 x 209 mm (13.5 x 20 x 8.3 inches)	
Weight: With G580 ATU system option: 20kg (44 lbs) G581 Wide band Ant. system option: 18kg (39.7 lbs)	

MILITARY & INDUSTRIAL STANDARDS			
MICOM-2ET-RDP meets the following US military and industrial standard requirements for adverse environmental conditions			
Environmental Condition	US Military STD 810C	US Military STD 810D	US Military STD 810E
Vibration	Method 514.2	Method 514.3	Method 514.4
Shock	516.2	516.3	516.4
Rain	506.1	506.2	506.3
Dust	510.1	510.2	510.3
Salt Fog	509.1	509.2	509.3
The MICOM-2ET-RDP also meets the EIA-RS152B for shock, vibration and applicable test procedures, US FCC for channel occupancy, spurious, interference and frequency tolerance. It is manufactured according to the demanding standards of ISO 9000 and EMC (Electromagnetic Compatibility).			
FCC Information: Emissions: J3E, R3E, H3E, J2A, J2B, B8C FCC Applicable Parts of Rules: 15, 80, 90 FCC Type Acceptance Number: ABZ9QCC1635 With High Stability Option: ABZ9QCC1634			

OPTIONS	
● RS232 Remote Contol Interface	● Interlink Interface
● Linear Amplifier Interface	● RSS for PC (Radio and ALE)
● Phone Patch Interface	● High (0.1 PPM) Frequency stability
● Data/Fax Modem interface	

MAJOR ACCESSORIES	
● Phone Patch	● 1 kW Amplifier
● Interlink (FM-HF Repeater)	● 400 W Amplifier
● Automatic Antenna Tuner	● Antennas and Grounding Kit
● Automatic Telephone Interconnect	● Data/Fax Modem
	● CW Key & Headphones

Specifications subject to change without notice.



**MOBAT Communications Ltd.**  
3 Israeli Shimon St. P.O. 5090  
Ind. zone rishon le Zion 75151 Israel  
Tel: 972 3 9518050 ext. 205  
fax: 972 3 9527233  
e-mail: govors@mobat.com  
web: www.mobat.com

**MOBAT USA**  
1720 west Paul dir. dr.  
Tallahassee fl. 32310  
Tel: 850 580 0444  
fax: 850 580 2626  
e-mail: marketing@mobatusa.com  
web site: www.mobat.com

