



TECHNICAL SHEET

PORTABLE HF COMMUNICATIONS

Robust system including 12V backup power system, HF transceiver, single wire broadband antenna and rollable composite mast for use in harsh conditions.



PROUDLY DESIGNED AND ASSEMBLED IN CANADA

Agile, robust and easy-to-use high-frequency (HF) radio system. It is designed to be deployed rapidly and ensure communications in harsh weather environments. The system also includes a battery to allow complete functionality when grid power is unavailable.

The system is designed in a case with polyurethane wheels to withstand rough terrain while the one-handed retractable handle makes it easy to use and versatile.

All ABO Technologie Inc. systems can be customized. The information contained in this technical sheet is based on a standard configuration and serves for informational purpose only.



HF PORTABLE RADIO

KEY FEATURES:

- Quick Deployment and Intuitive Operation
- Software-Defined Radio (SDR) with 125 W RF power output
- Integrated LifePo4 Battery
- 2nd Generation Digital Voice (TWELP)
- AES-256 / DES-56 / CES-128 Encryption Option Available
- IP / Ethernet / USB Connectivity
- ALE and SELCALL Calling Capability
- Connected equipment will instantly switch to battery during a power blackout or power supply failure
- Supports direct solar panel (MPPT) battery charging

TRANSCEIVER

FEATURES

Channels/Scan groups: 100/10 (Optional: 1000/20)

Contact list entries: 250 (Optional: 500)

GPS Calling: Optional

Accessory Port: N/A (Optional: Standard)

Data Modem: N/A (Optional)

ALE: FED-STD (Optional: FED/MIL-STD/3G ALE)

RF SPECIFICATIONS

Frequency Range: Tx: 1.6 to 30 MHz; Rx: 250 kHz to 30

MHz Frequency stability: ± 0.3 ppm from -30°C to $+60^{\circ}\text{C}$

Modes: Single sideband (J3E), USB/LSB, ISB (B7D or B2B) AM (H3E), CW (J2A, J2E), AFSK (J2B),

FSK (J2D, F1B), Digital Voice and Data (G1D) (software defined)

Output Power: 125 W PEP ± 1 dB (two-tone or voice), user-programmable in 1 W steps (low/medium/high)

RF Output Impedance: 50 Ω

ELECTRICAL AND MECHANICAL

Operating Range: 10.8 to 15 V DC (12 V Nominal)

Supply Current: Rx: 500 mA (backlight min, audio muted)

Tx: Two-tone 12.5 A typical, average speech 8 A

Protection: Over-voltage/under-voltage/over-temperature/reverse polarity

OTHER

Encryption: CES-128, 97 x programmable 16-digit keys, 4-digit PIN (Voice only)

AES-256, 256 x programmable 256-bit keys (Voice/Data)

DES-56, 256 x programmable 56-bit keys (Voice/Data, non export-controlled)

Vocoder: MELPe (1200/2400 bit/s); TWELP (600/1200/2400 bit/s)

ANTENNA SPECIFICATIONS

Frequency Range: 2.0-30 MHz

Input Impedance: 50 OHM

Power Input: 125W

Digital & Data modes: 250W PEP

Input Connector: UHF-type socket

No tuner required

Stainless Steel Wire & Fittings

UV resistant balun/load housings

48m long HF Broadband Centre-Fed Dipole High Power / Digital Mode

MAST SPECIFICATIONS

Construct & Finish Mast Body: PP and glass fibre composite. UV resistant polyester fabric cover.

Mast Cover: UV resistant nylon fabric cover in plain black or Multicam variants.

Environmental: Water and dust proof. Maintenance free

Specification: Complies with the relevant sections of MIL-STD-810G.

Wind Rating: 100kmh (62mph) bare mast only, secured with guy ropes and ground or ice pegs

GENERAL & ENVIRONMENTAL

Input Power: 100 to 240 VAC 50/60 Hz for charging and operation

Size: 22" x 14" x 9" or 55,9 cm x 35,6 cm x 22,9 cm

Weight: Approx. 37.2 lbs. / 16.87 kg

Multiple color options

Case: Waterproof (IPX7), dustproof (IP6X) & MIL-SPEC certified

2-year warranty (5-year warranty also available)

SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE