## **TECHNISONIC**

Communications

# MISSION-BASED. PERFORMANCE-DRIVEN.



### TDFM-136B

## ANALOG/DIGITAL VHF/FM TRANSCEIVERS

The all new Technisonic TDFM-136B is a Project 25 U.S. Forest Service compliant airborne VHF/FM transceiver. Providing digital or conventional analog FM communications on every currently available channel from 136 to 174 MHz within the VHF/FM band. The new 136B has been designed from the ground up with your forestry mission in mind as a drop-in replacement for existing Technisonic and NPX radio sets.

- The TFDM-136B operates on the Common Air Interface and is capable of multimode operation at 12.5 kHz analog\* and Project 25 12.5 kHz digital modulation on a channel-by-channel basis.
- The TDFM-136 transceiver features a Two Channel Synthesized Guard receiver.
- Allows up to 230 non-volatile memory positions (channels) via front panel 12 button key pad, or downloaded from a PC.
- Direct Entry or Simplex mode is accomplished by simply keying in the desired operating frequency.
- A 48-Character, 2 line LED matrix display, is available in green or optional NVG compatible.
- Support of unique CTCSS and DCS signaling for transmit and receive frequencies.
- New architecture is based on Digital Signal Processor (DSP) technology and does not depend on availability of proprietary chip sets from competitive vendors.
- Encryption support of DES single bit cypher feedback encryption to enable operation with existing systems and is upgradeable to Project 25 DES OFB or AES encryption standard.
- A USB upload/download function allows the operator to program all radios via a PC.
- Scan enabled across any or all of the channels stored in the preset memory positions.
- The TDFM-136B transceiver is panel-mounted (standard Dzus) and completely self-contained in a 3.0" (H), 5.75" (W) and 8.0" (D) chassis weighing just 3.5 pounds.
- Front panel controls are MAIN for main channel volume, GUARD for guard channel.



#### **TDFM-136B GENERAL SPECIFICATIONS**

#### **Frequency Range:**

136.000 MHz to 174.000 MHz

#### **Operating Modes:**

Project 25 CAI and conventional analog simplex or semi duplex

P25 Conventional Digital Mode

Channel Spacing: 12.5 /25 kHz \* (230 Preset Channels)

**Dimensions:** 3.0" (H), 5.75" (W) and 8.0" (D)

Weight: 3.5 Lbs (1.6 Kg)

**Temperature Range:** -45°C to 70°C

Power Requirement: 28 V DC

Certification: FCC and DOC Type Approved

Guard receiver: 2 channel synthesized

#### **CTCSS Squelch Capability:**

Encodes/decodes all 64 available tones

**DPL/DCS capability:** All available digital squelch codes

**DTMF Encoder:** All standard DTMF tones supported

**Audio Output:** 500mW into 600 ohms **Speaker Output:** 2.5 Watts into 4 ohms

Backlighting: 28V DC or 5V DC, software selectable

\* 25 kHz analog operation is only enabled where permitted by statute

## MORE CAPABLE, LESS COST.