



The ROVER 5 Handheld is a portable transceiver device that transforms sensor-toshooter networking with the highest levels of collaboration. It transmits time-sensitive targeting data and displays sensor data from multiple airborne platforms.

# **Key Features**

- Multi-band reception and transmission
  - Ku-band\*
  - C-band\*
  - L-band
  - S-band
  - UHF
- Integrated video display
- · Highly compatible and interoperable
  - Digital and analog waveforms
  - Metadata (KLV supported)
  - Video encode/decode

- Intuitive Control GUI
- Pre-mission configuration
- Waveform control
- Band and frequency
- Power
  - Lithium-polymer battery
  - AC/DC vehicle accessory power cable
- \* Transmit function requires external PA and antenna.



# **Product Description**

The ROVER 5 is a small, lightweight, rugged Software Defined Radio that provides a digital capability for full-motion video, situational awareness, targeting, Battle Damage Assessment (BDA), surveillance, convoy operations and other situations where eyes-on-target are required. ROVER 5 provides enhanced air and ground coordination which shortens talk-on-target for time-critical operations. Because ROVER 5 is a versatile Software Defined Radio, it is forward compatible through easily loadable upgrades for both radio and video codecs. ROVER 5 is designed to operate with encryption, and is CDL and STANAG compliant. It is backward compatible and interoperable with the thousands of ROVER III, eROVER and ROVER 4 units fielded to date, as well as the platforms they support, including Predator, Shadow, Dragon Eye, Litening Pod and other Joint and Coalition assets.

# **Specifications**

#### **Performance Characteristics**

#### **Transmit and Receive Bands**

Ku-band\*: 14.4–15.35 GHz,1.0 MHz steps
C-band\*: 4.40–4.950 GHz, 1.0 MHz steps
5.25–5.85 GHz, 1.0 MHz steps

S-band: 2.2-2.5 GHz, 0.5 MHz steps
L-band: 1.71-1.85 GHz, 0.5 MHz steps

• UHF: 400-470 MHz

#### **Data Rates**

- 200 kbps spread and unspread
- 400 kbps spread and unspread
- 455 kbps
- 466 kbps
- 1.6 Mbps
- · 2.0 Mbps spread and unspread
- 3.2 Mbps
- 10.71 Mbps
- 21.42 Mbps
- 44.73 Mbps
- 50 kbps to 5 Mbps

### Video

- Analog NTSC
- H.261 (receive only)
- H.264
- MPEG-2
- MPEG-4
- MJPEG

#### Modulation

- FM
- FSK
- BPSK (CDL interoperable)
- O-QPSK (CDL interoperable)
- \* Transmit function requires external PA and antenna.

## **Performance Characteristics (continued)**

### **Encryption**

- Triple DES
- AES
- Type 1

### **FEC (Forward Error Correction)**

- Rate 1/2 convolutional
- Rate 1/2 convolutional with concatenated Reed-Solomon
- Turbo product code

#### **External Interfaces**

- 10/100 Base-T Ethernet
- USB 2.0 for file storage
- Configurable RS-232 (qty. 2) or RS-422 (qty. 1)
- RS-422 (qty. 2)
- Audio input/output
- External power connector
- BNC external video input/output

### User Interfaces

- Menu-driven user interface
  - Integrated touch screen LCD display
  - Button control
- Display: 5.6 inch, sunlight readable

# **Physical Characteristics**

- Size: 9.5" x 5.6" x 2.25" (with antenna)
- Weight: 3.5 lbs
- Power: Lithium-ion battery
  - 2.5-3 hour operation (estimated)
  - Power supplies allow DC or AC input
  - 9-36 VDC (with power supply)95-270 VAC, 47-440 Hz
- Temperature, operating: 0° C to +45° C

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