



COFDM Digital Microwave Video and Audio Receiver



MIL Series COFDM Digital Video Receiver

- ❑ High Performance Digital Microwave Video and Audio Receiver
- ❑ COFDM for multipath immunity
- ❑ MPEG-2 Video
- ❑ Two audio and one data channel
- ❑ AES Digital Encryption
- ❑ Main/Aux Video Outputs
- ❑ P, L, S, and C – Band Models
- ❑ Multi-Channel Operation
- ❑ Integral LNA
- ❑ Built-in audio monitoring and headphone amplifier
- ❑ Rugged Packaging
- ❑ Intuitive Operator Interface with VFD
- ❑ Built-in Universal AC Power Supply

MIL Series COFDM Digital Microwave Video and Audio Receiver

The MIL Series brings a new level of digital performance and reliability to video and audio collection. Available in P, L, S, and C-bands, the MIL-100 provides high quality demodulation of COFDM digital video and audio signals. The integral LNA and high-selectivity IF filters guarantee reliable receiver operation in harsh RF environments. A user AES encryption key safeguards against unauthorized intercept.

Receiver parameters are controlled from the front panel user interface. Frequency selection, COFDM mode, and encryption key codes are accessible through a front panel push-buttons and an easy to read multi-line VFD. Two balanced audio outputs and one data channel are standard. Both NTSC and PAL analog output formats are supported. Built-in speakers and a headphone jack facilitate easy audio monitoring. A LAN connection allows extended remote control.

Packaged in a compact and rugged housing, the construction lends the MIL Series to applications where quick set-up with a minimum of external equipment is desired. The MIL Series receiver includes a universal AC power supply and may be operated from commercial power or batteries. Front panel connectors include a video output and dedicated A/V outputs for recording. Additional features are contained on a comprehensive rear panel 25-pin connector for quick and easy integration into any system without expensive specialized connectors.

The MIL Series digital receiver is well suited for video collection applications in surveillance, law enforcement, military UAV, RPV, UGV and MOUT, as well as airborne data/telemetry.

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Technical Specifications

Electrical:

- Frequency Range
 - MIL COFDM 100P – 340 to 400 MHz
 - MIL COFDM 100L – 1.7 to 1.9 GHz
 - MIL COFDM 100S – 2.2 to 2.5 GHz
 - MIL COFDM 100C1 – 3.1 to 3.5 GHz
 - MIL COFDM 100C2 – 4.4 to 5.0 GHz
- Tuning Step – Channelized (1 MHz steps)
- Frequency Stability – $\pm 0.002\%$
- Sensitivity – -90 dBm threshold
- Compression – MPEG-2 4:2:0
- Modulation – COFDM 2K
- Video Output Format – NTSC or PAL
- Video Delay – Low Latency (< 50 ms)
- Video Output Impedance – 75 Ω unbalanced
- Video Output Level – 1 V p/p
- Audio – Two Digital Channels
 - Linear Sampling
 - 200 Hz to 15 kHz ± 1.5 dB
 - 600 Ω Balanced Output
 - Line Level +4 dBm

Environmental:

- Operating temperature: -10 to +65 °C
- Relative Humidity: 0 to 95%, non-condensing

Mechanical:

- 25-pin full function I/O connector
- Dimensions – 3.25 H x 7.25 W x 8.3 L inches
- Video Output Connectors – BNC female, RCA
- Audio Output – Two RCA's, 3.5 mm headphone jack, two internal speakers, dual volume controls
- Housing – Milled aluminum and ABS
- Weight – 4 lbs.
- RF Input Connector – SMA female

Power:

- Operating voltage: 90 – 240 Vac or +10 to +36 Vdc
- Current: 1.5 A @ 12 Vdc

Options:

- Base Mount Mounting bracket for fixed installations
- Diversity Dual diversity digital comparator

Accessories:

- Antennas A complete line of antennas for a variety of applications is available.

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May be subject to export restrictions.
Design specifications subject to change without notice.
AIRLINX Communications, Inc. MIL Series Data Sheet