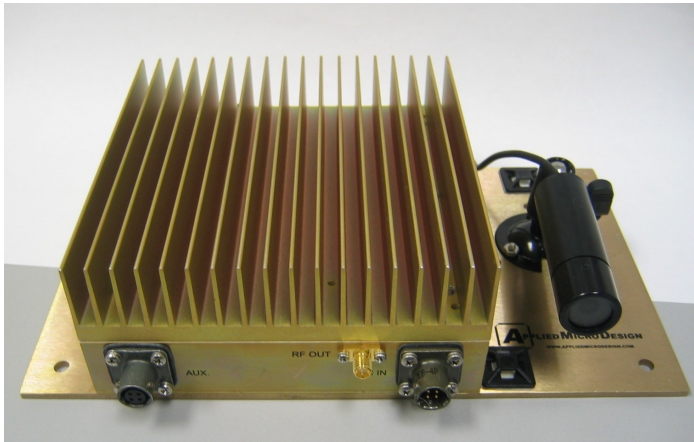


L-BAND TRANSMITTER MODEL 01274



- Frequency Synthesized
- Rugged
- Compact
- High Efficiency
- 100% Continuous Duty Cycle
- Frequency Switch Selectable

The Model 1274 Transmitter/Camera Assembly consists of a 10 Watt L-Band video transmitter and a high-resolution color “bullet” camera, cabled together and mounted on a single plate. The assembly is shipped pre-wired and ready for installation on the vehicle. It is only necessary to connect power, antenna, and the optional control line to operate the unit.

The transmitter is frequency synthesized and phase-locked to a TCXO with a frequency stability of ± 1 ppm. A microcontroller interfaces to a pair of rotary switches to control the frequency; transmitter frequency is switch-selectable from 1700 to 1900 MHz in 10 MHz steps.

The transmitter has two modes of operation; Transmit and Standby. The mode is selected via a pulse width modulated input, or a logic level, at the Aux connector. If no signal is input to the Aux connector, the transmitter will power up in Transmit mode.

The transmitter is available as a standalone unit. Other configurations are available; consult factory for details.



Specifications

RF:

Frequency Range: 1700-1900 MHz
Channel Spacing: 1 MHz
Power Output: +40 dBm (10 W)
Output Impedance: 50Ω
2nd Harmonic: -50 dBc
Frequency Control: Phase-locked to TCXO
Frequency Stability: ±0.0001% (±1 ppm)
Type of Modulation: FM
Transmit Bandwidth: ±10 MHz
Load Mismatch: Infinite no damage, all angles

Video:

Input Level: 1 Vp-p (NTSC)
Input Impedance: 75 Ω
Bandwidth: 4.5 MHz
Channel Capacity: 1

Mechanical:

RF Output Conn.: SMA (female)
Video Conn.: BNC (female)
Auxiliary Conn.: MS3112E8-4S
DC Power Conn.: MS3112E8-4P
Size: 5.5" x 5.375" x 2.375"
(transmitter only)
9.5" x 5.5" x 2.5"
(on plate with camera)
Weight: 2.3 lbs (transmitter only)
3 lbs. (with plate & camera)

Power:

DC Voltage: 12 V DC
Transmit Current: 2.5 A nominal
Reverse Polarity: Protected
Efficiency: 30% nominal
Duty Cycle: Continuous

Environmental:

Operating Temp.: -30° C to +60° C

Applied Micro Design is an engineering company providing product and services to both government and private industry. The staff has expertise in the hardware and firmware design of microprocessor-based systems, RF circuit design, analog and digital design, and computer applications programming. The company designs, develops and manufactures high performance, cost effective autopilots for small Unmanned Aerial Vehicles and control systems for Unmanned Ground Vehicles. AMDI provides a wide range of products, services, and systems, including radios for command and telemetry applications, video transmitters, low-noise amplifiers, and Ground Control Stations.

Coastal Defense provides system integration and operations support to government and commercial clients. The company offers a broad range of expertise in defense related technologies including operations, intelligence, security, and training. Coastal Defense also provides Surrogate Unmanned Aerial Vehicles, Unmanned Ground Vehicles, and Tactical Unmanned Aerial Vehicles in support of test, evaluation, and operational requirements.

Applied Micro Design and Coastal Defense have teamed in the development and marketing of the video transmitters as well as Receiver Test Set, control systems, and related systems and services.



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