- High Performance Microwave Video Transmitter
- Up to Two Audio Channels Available
- High/Low Power Selection
- L, S, C and X – Band Models
- Multi-Channel Selection or 1 MHz Steps
- Ferrite Isolator Output
- NTSC or PAL Standard
- Optional cut-and-rotate scrambling
- Rugged Packaging

AT Series Microwave Video and Audio Transmitter

The AT Series from Pacific Microwave Research brings a new level of performance and reliability to video and audio transmission. Available in L, S, C, and X – Bands, the AT-100 provides a minimum of 2W of power into any load. A low power selection is available for applications were power consumption is critical or link margin is sufficient. Packaged in a rugged aluminum housing, the single-board electronics construction lends the AT Series to applications where severe environmental conditions are the norm. Frequency selection is controlled by a sixteen-position selector switch or by an optional BCD code plug for remote control in 1 MHz steps. An optional cut-and-rotate scrambler is integral to the transmitter. A comprehensive front panel 9-pin connector provides quick and easy integration into any system without expensive specialized connectors. Two balanced audio subcarriers may be factory selected to any frequency between 5.5 to 8.5 MHz and configured for either microphone or line level. Video and audio pre-emphasis may be set to either the NTSC or PAL standard. The AT Series transmitter is well suited for applications in Homeland Security, surveillance, law enforcement, UAV and RPV, remote broadcast, video production, and airborne data/telemetry.

Pacific Microwave Research, Inc.
921 Poinsettia Ave., #10, Vista, CA 92081
Tel: (760) 295-5416 www.pmicrowave.com

AT Series Microwave Video and Audio Transmitter

Technical Specifications

Electrical:

- Frequency Range
  - AT 100L – 1.7 to 1.9 GHz
  - AT 100S – 2.2 to 2.5 GHz
  - AT 100C1 – 3.1 to 3.5 GHz
  - AT 100C2 – 4.4 to 5.0 GHz
  - AT 100C3 – 6.2 to 6.4 GHz
  - AT 100X – 8.2 to 8.6 GHz
- Ferrite Isolator Output Protection
- VSWR – Infinite (open or short)
- Modulation – True FM
- Modulation Sense – Positive
- Frequency Stability – ±0.002%
- Emphasis – NTSC or PAL
- Spurious/Harmonic Output – > -65 dBc
- Analog or Digital Input filtering options
- Video Input Impedance – 75 Ω unbalanced
- Video Input Response – 10 Hz to 4.5 MHz
- Video Input Sensitivity – 8 MHz/Volt
- Audio – any two between 5.5 to 8.5 MHz
  - Phase Lock Loop
  - 20 Hz to 20 kHz ±1.5 dB
    - 600 Ω Balanced Input
    - Microphone or Line Level
- Power Output
  - High Power – 3.0 W nominal
  - Low Power – 0.3 W nominal
- 11 – 14 Vdc input, 1.3A Max

Environmental:

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

Mechanical:

- 9-pin full function I/O connector
- Dimensions – 1.5 H x 2.5 W x 3.5 L inches
- Video Input – BNC female
- Housing – milled aluminum
- Weight – 6.0 oz.
- RF Output – SMA female

Options:

VID-1	NTSC format
VID-2	CCIR format
FRQ-0	Fixed Frequency Single Channel
FRQ-X	X number of channels (16 max.)
FRQ-BCD	Frequency selection via BCD
SUB-1	Any frequency between 5.5 to 8.5 MHz (mic or line level)
SUB-2	Any frequency between 5.5 to 8.5 MHz (mic or line level)
SCRAM-1	Fixed code cut-and-rotate video scrambler
SCRAM-2	Configurable code cut-and-rotate video scrambler
A/B INPUT	Selectable A/B video inputs

Accessories:

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

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