

Video Transmitters 250 mW/2W and 2W/5W

Power Selectable Video Transmitter

VMX-2000 & VMX-5000

FCC TYPE: H25VMS2000
H25VMS5000



Features

- ▲ Exceptionally thin, only .512"
- ▲ No heatsink required in most applications
- ▲ Ten channels, user programmable
 - Video in 250 KHz steps
 - Two audio subcarriers from 6.0-7.5 MHz
- ▲ Ten channel select switch
- ▲ Efficient switching power supply
 - Reduces heat generated
 - Extends battery life
- ▲ Two models available
 - 250 mW/2W power output
 - 2W/5W power output
- ▲ Power High/Low switch on chassis
- ▲ Remote programming, channel, and ON/OFF control through multipin connector
- ▲ Compatible with all VMS/L series accessories
- ▲ Programming, power and video cables included

250 mW/2W & 2W/5W Watt Video Transmitters

DTC has designed two exceptionally small higher power transmitters sharing many of the features of the VMS/VML-250.

The VMS/VML-2000 provides a selectable power output of 250 mW or 2 Watts. It's internal switching power supply enables it to be operated without a heat sink in most applications, with a height of only .512". This makes it very easy to conceal. An optional heat sink is available for use when the transmitter is located in a sealed environment, or where the temperature rise is the highest.

An added benefit of the switching power supply design is reduced power consumption of only 7 Watts, providing extended battery life versus other transmitters.

The VMS/VML-5000 provides a selectable power output of 2 Watts or 5 Watts, and is suited for airborne surveillance, border patrol, and other long range surveillance applications. A heat sink is required for operation, and ships with each unit upon request.

Both transmitters feature ten user programmable video frequencies, selected via a ten position switch. Remote control and programming is provided by means of a multi-pin connector. If this connector is engaged, the local controls are overridden by the controller device.

Two audio subcarriers are also user programmable by channel. These subcarriers are phase locked, and will not drift into the video frequency. Low speed data may be transmitted over the subcarrier for telemetry applications.

Transmitters are available with a complete set of cables for programming, power, and video connections. Molex MicroFit locking connectors are used, and all connections are color coded. DTC's standard cable kit enables you to be in operation in seconds, and includes a rubber duck antenna with right angle SMA adapter.

Models

- ▲ VML-2000 or 5000, 1700-1850 MHz operation
- ▲ VMS2-2000 or 5000, 2200-2300 MHz operation
- ▲ VMS-2000 or 5000, 2400-2500 MHz operation

Add "-HO" to any VMXX-2000 transmitter part number for the optional heat sink at no additional charge. Most applications will not require the heat sink.

Contact your DTC sales representative for other frequency bands which are not listed here

Add "ENC" to any of the above model numbers for Video Encryption

Add "ENC-AV" for Audio & Video encryption

Ordering Information

- ▲ Select model based on your power output and operating band
- ▲ Provide DTC with initial video frequencies (up to ten) and audio subcarriers. Subcarriers are programmable by channel. All channels may be the same if desired.

Specifications

Power Input Voltage	External 11-16 VDC
Reverse Polarity Protection	yes
Power Consumption	7 watts @ 12 VDC (VMX 2000)
Temperature Range	-30° to +70°C (operating)
Humidity	90% non-condensing
Dimensions	VM*-2000, no heat sink, 3.87" x 2.75" x .512" VM*-2000, with heat sink, 3.87" x 2.75" x 1.75" VM*-5000, no heat sink, 5.37" x 3.20" x .512" VM*-5000, with heat sink, 5.37" x 3.20" x 1.75"
Camera Power	Same as supply voltage going into the transmitter. Current limited to 200 mA
Controls	10 channel select rotary switch panel mounted, slide ON/OFF switch
Connectors	2 pin Lemo: Mic 1, Mic 2 SMA: Antenna 6 pin Multi I/O: Video in, Data in, DC input 9-16 Vdc, camera power, Remote ON/OFF, Multiplexed Data out, Ground
Programmability Video	250 KHz resolution steps over band
Audio	User programmable from 6.0-7.5 MHz, in 10 KHz steps
Chassis Notes	Machined, solid aluminum with rounded edges
AUDIO	
General	Mic level input (line level factory opt.) 50-3000 Hz. Phased locked AGC on both inputs. Subcarrier auto sensing, only active when microphone is attached.
Number of Subcarriers	2
Subcarrier Frequencies	6.0-7.5 MHz, user programmable per channel
Subcarrier ON/OFF control	Subcarriers are activated when mic is connected
Subcarrier Frequency Stability	+/- 0.003%, -30 to +70°C
Subcarrier Deviation	50 KHz peak
Audio S/N	45 dB min.
Frequency Response	BW1.5dB = 50-3000 Hz
Total Harmonic Distortion	<2%
Input Level	8 mVpp@400 Hz for 50 KHz peak dev.
Pre-Emphasis	75 uS
Input Impedance	10k ohm
VIDEO	
Video Frequency Response	BW1.5dB = 6 Hz - 5.0 MHz
Input Impedance	75 ohms
Input Level	1Vp-p Max.
S/N	60 dB min.
Pre-Emphasis	Per CCIR 405 525 line curve
Differential Gain	5%
RF	
Power Output	VMS/L-2000 1/4W-2W @ nominal supply voltage, 25 Deg. C. VMS/L-5000 2W-5W minimum
Output Impedance	50 ohms
Spurs and Harmonics	-50 dBC output
Encryption	Ovation Micro-Viewlock II-External module

- ▲ Order the SMA to TNC adapter cable, p/n 4045174-006, if require
- ▲ Call for availability

