

# Palladium™ Digital Video Transmitter

## Pd-TX-100, Pd-TX-250 & Pd-TX-1000

FCC PART 90 TYPE CERTIFIED H25

The Palladium Series of digital video transmitters provide exceptional video quality in high multipath environments. They are ideal for use inside buildings, in urban areas, and other applications where multipath would normally cause video tearing or breakup.

All Palladium Series transmitters are designed for 2.5 MHz channel spacing and use approximately 400 carriers to transmit video and two channels of voice and a data channel. Transmitters may be located on adjacent channels without a guard band. AES encryption ensures users of secure communications.

The Palladium 100 is a small transmitter with a 100 mW RF power output. It's ideal for concealments and shorter range robotic and UAV applications. The package is only 5.5" H x 2.5" w x 0.75" D. Power consumption is 7.5 Watts. All connections are conveniently located off the end of the unit. Many users will want to power this device with disposable batteries.

The Palladium 250 and 1000 incorporate an internal power amplifier bringing total power output to 250 mW and 1000 mW respectively. Height and width are identical to the Palladium 100, with the depth of the unit increasing an additional 0.5". The Palladium 250 and 1000 are ideal for many surveillance applications and short to mid-range robotic and UAV applications.

All versions are built out of rugged milled aluminum housings, with threaded mounting holes incorporated into the chassis. An OEM board level unit is also available.

### Features

- ▲ Power Output available 100mW, 250mW, 1000mW
- ▲ Available in frequency bands from 1150 to 2500 MHz
- ▲ Narrow bandwidth 2.5 MHz wide channel
- ▲ Multipath resistant 400 carrier COFDM
- ▲ Full frame rate high resolution digital video
- ▲ Supports both NTSC & PAL formats
- ▲ Low latency MPEG-2 compression
- ▲ Two high fidelity audio channels
- ▲ Data channel, half duplex, RS232 up to 119K Baud
- ▲ AES 128 encryption, AES 256 optional
- ▲ Low power consumption, 9-16 VDC Power
- ▲ Single board compact size/Rugged aluminum housing
- ▲ 8 programmable channels



COMMUNICATIONS

486 Amherst Street ▲ Nashua, NH 03063 ▲ www.dtccom.com ▲ Call to order: 1-800-233-8639 (MDS1920049 08AUG07)



### Specifications

#### General

Video Format	NTSC, PAL (User Selectable)
Video Compression	MPEG II
Horizontal Resolution	352, 480, 528, 704 Pixels, (User Selectable)
Frame Rate	NTSC-30fps, PAL-25fps
Video Latency( End to End)	As low as 53mS
Operating Frequency	L1 (1150 - 1400 MHz) L (1710 - 1850 MHz) S2 (2200 - 2300 MHz) S (2350 - 2500 MHz)
COFDM	400 Carriers
Modulation	Selectable QPSK or 16QAM
Channel Bandwidth	2.5 MHz
Guard Interval	1/16
FEC Selectable	2/3, 1/3
Aux. Data Channel Interface	RS-232, half duplex, up to 119K Baud
Control Port Interface	RS-232 (GUI Control Software Included)
Encryption Type	AES 128 bit key, 256 Optional
Power Input Voltage	External 9-16 VDC
Power Consumption	7.5 Watts (100 mW) 11 Watts (250 mW) 24 Watts (1000 mW)
Weight	13.6 oz

### Models

- ▲ Pd-TX-100-XX 100mW
- ▲ Pd-TX-250-XX 250mW (Does not support L1 band)
- ▲ Pd-TX-1000-XX 1000mW (Does not support L1 band)