

Video Transmitter Module TXM2

Datasheet



Revision History

Revision	Change
V1.0	Initial version
V1.1	Added weight, mechanical drawing

Note: Not compliant with RoHS, exempt by RoHS Product Category 9 based on Review of Directive 2002/95/EC (RoHS)

Video Transmitter Module TXM2

Perthold Engineering LLC

Overview

The TXM2 is designed to transmit video and audio signals over a wireless connection. It makes use of the 5.8GHz IMS band which is an alternative to the more and more crowded 2.4GHz band.

Features

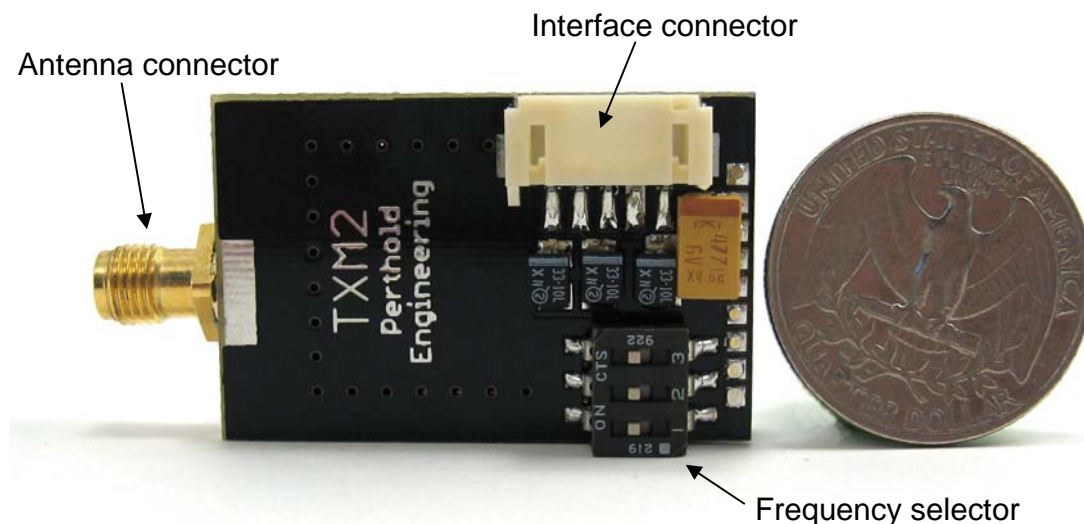
- SMA connector for standard high frequency antennas.
- Small size of 25x39x13mm (1x1.5x0.5 inches) without heatsink
- Low weight (13g / 0.46oz without heatsink, 23g / 0.81oz with heatsink)
- 7 selectable frequency channels
- Provides 1 video channel (PAL and NTSC) and 2 independent audio channels
- Convenient external interface
- Available in 2 transmission powers

Configurations

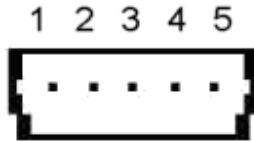
The TXM2 module is available in two configurations/power modes

TXM2-100mW (20dBm)
TXM2-450mW (27dBm)

Board Layout



Interface Connector Front View



- 1: Supply (5V)
- 2: GND
- 3: Video Signal
- 4: Audio Left Channel
- 5: Audio Right Channel

Frequency Channel Selector

Output channel is selected with the DIP switches:

Switch 1	Switch 2	Switch 3	Channel
On	On	On	1; 5740 MHz
On	On	Off	2; 5760 MHz
On	Off	On	3; 5780 MHz
On	Off	Off	4; 5800 MHz
Off	On	On	5; 5820 MHz
Off	On	Off	6; 5840 MHz
Off	Off	On	7; 5860 MHz
Off	Off	Off	7; 5860 MHz

Voltage Supply

Supply voltage: 4.8 to 5.2V

Nominal supply current: 320mA (100mW)

Nominal supply current: 600mA (450mW)

If you exceed the maximum voltage of the module you will damage it. Based on your available system voltage you may need a linear voltage regulator or dc/dc converter.

See table for suggested voltage regulators:

Module voltage	System voltage 3.6V (1 LiPo battery)	System voltage 7.2V (2 LiPo batteries)	System voltage 9V or higher
5V	DC/DC stepup converter	Linear regulator or DC/DC stepdown converter	DC/DC stepdown converter

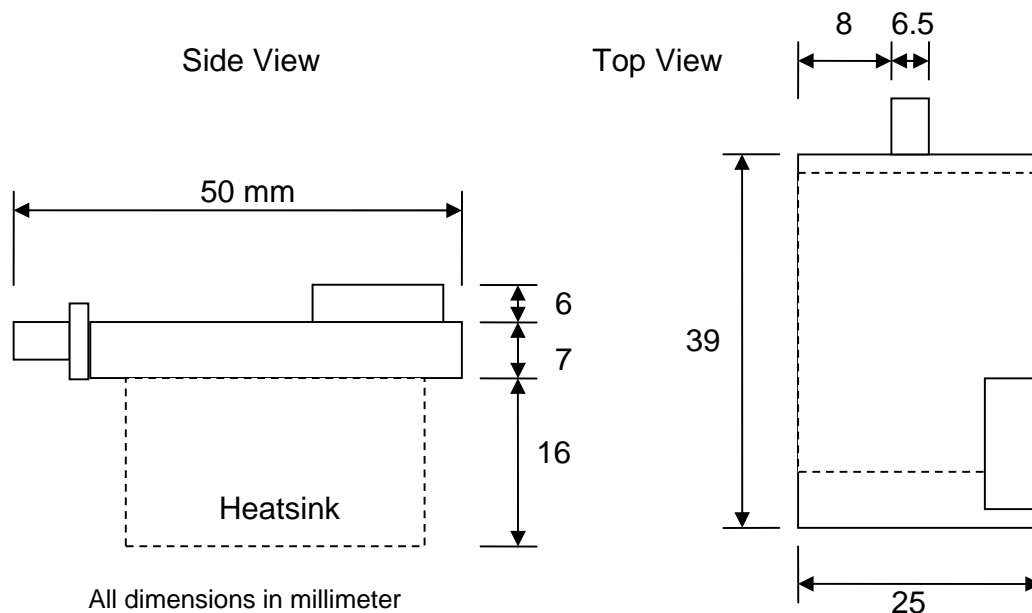
Heatsink

The TXM2 with 450mW HF output power will require a heatsink in order to not get damaged. The module will produce about 3W in heat that needs to get dissipated. Operating the module without heatsink will damage it quickly.

Antenna

The TXM2 needs a proper 5.8GHz antenna in order to operate. Using the module without antenna or an antenna not designed for the 5.8GHz frequency band will cause a permanent damage.

Mechanical Dimensions



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