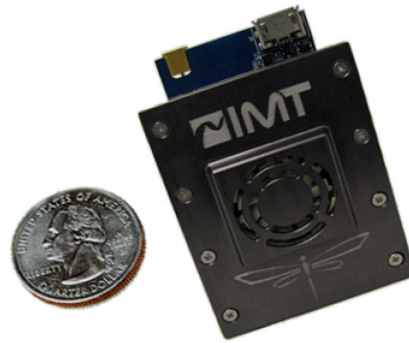


IMTDragonFly

Miniature COFDM Transmitter/ Camera Transmission System

The IMTDragonFly Transmitter is a superior miniature wireless video transmission system, designed to capture real-time, high-quality video from Point of View Cameras, UAV/UGV/Body Cams/Concealments, and static sports cameras for display on fixed or mobile receive applications.



The IMTDragonFly is small, lightweight and runs up to four hours using two cell batteries.

The transmitter features HD/SD-SDI or optional HDMI inputs in a small, lightweight chassis. The IMTDragonFly delivers up to 50 mW of power in a package weighing less than 1.2 ounces (34 grams), providing long range, reliable HD video transmission. Perfect for the most demanding portable and drone based applications.

The IMTDragonFly is a compelling choice when broadcast quality, exceptional range and reliability are required. Vislink's technology ensures the transmission of uninterrupted, live broadcast quality pictures over long ranges, despite the effects of foliage, challenging terrain, buildings, and other common non-line-of-sight limitations.

The IMTDragonFly operates at low latency levels, making it well-suited for remote control applications. The IMTDragonFly was designed with a minimized size and weight form factor and power requirements, making it ideal for drone use. IMTDragonFly has an HD-SDI input for high quality camera interface. IMT has also developed a new antenna design customized specifically for use with micro drones.

The IMTDragonFly may be configured or remotely controlled by the built-in Wi-Fi Web server. An Android or iOS device will see the IMTDragonFly and automatically open the control browser. Optionally, a 900MHz transceiver enables processing of in-flight commands including camera control or gimbal manipulation.

Key Features

- Range over 2 miles Line of Sight
- Licensed and ISM frequencies
- < 4 W DC power consumption
- Very Low latency
- HD/SD H.264 encoding
- Lightweight < 1.2 ounces (34 grams)
- HDMI or SDI camera inputs
- Wi-Fi Control, Status, and Configuration
- RS232 Remote Control
- Transceiver for telemetry data

Options

- LMS-T
- POV Camera kit
- S-Bus or RS485 for control
- Cameras
- Camera control

Typical Applications

- Sports and Entertainment
- Electronic News Gathering (ENG)
- Surveillance
- Aerial – Drones for events, sports, and cinematography
- UAV/Drones
- Public Sector
- OEM POV Cameras – RefCam, jockey, goalie, NHL, MLB, football, and entertainment events.

Available Accessories

- Carrying case
- Testing accessories
- Downlink antenna



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Frequency Bands and RF Performance

Base Model Number	Frequency (GHz)	Power Out (mW)
23DTx	2.0 - 2.5	50
55DTx	5.1 - 6.0	50

Frequency stability

- ± 10 ppm

Modulation Modes

- Modulation Formats: COFDM (DVB-T) LMS-T (Optional)
- Carriers: 2K
- Constellation: QPSK, 16QAM
- Code Rate: 1/2, 2/3, 3/4, 5/6, 7/8
- Guard Interval: 1/32, 1/16, 1/8, 1/4
- Bandwidth: 6, 7, & 8 MHz

MPEG Encoder Video

- Video Coding: MPEG-4 Part 10/H.264
- Video Input: HD SDI (AX Model) HDMI (SX Model)
- Video Formats*: 720p 50, 59.94 1080i 50, 59.94
- *1080p 60 (optional)

Audio

- Audio Input: Embedded, SDI/HDMI
- Audio Coding: MPEG 1 (Layer II)
- Audio Sample Rate: 48 KHz
- External Microphone: Digital*
- *Future option

Control Wired

- RS232 with Command Protocol

Wireless

- Wi-Fi
- 2.4 GHz ISM Band
- Android/iOS Web

Camera Control (Optional)

- FocalPoint
- Brightness, Color Hue
- Color Gain, Contrast
- White balance mode

Wi-Fi Wireless Web Page Settings

- Frequency
- Bandwidth
- Modulation
- Camera

Status

- Power
- Frequency
- Battery Run Time Meter

Alarms

- Power
- Video
- Battery
- Temperature (overheating)

Power Consumption

Mode	Voltage (V)	Current (A)	Power (W) Typical
High (2GHz SDI)	7.5	0.46	3.4
High (2 GHz HDMI)	7.5	0.52	3.9
High (5 GHz SDI)	7.5	0.58	4.4
High (5 GHz HDMI)	7.5	0.64	4.8
Standby	7.5	0.34	1.6
Hibernate	7.5	0.04	.225

Power Requirements

- Input range: 6-16 VDC
- Power consumption: Version dependent

The DFT features extremely low power consumption. In addition, the DFT's hibernate mode is specifically designed to save battery power when not being used. This mode lets the DFT power down to all but the minimum required circuitry to listen for instructions. Hibernate to full power takes less than 12 seconds.

Environmental Temperature Range

- Full specification: -10° to +50° C (14° to 122° F) Ambient
- Storage: -40° to +80° C (104° to 176° F)
- Humidity: 0 to 95% non-condensing

Altitude

- Operating: 20,000 ft. (6,000 m)
- Storage: 50,000 ft. (15,000 m)

Physical Characteristics Size

- 1.85" x 1.38" x .51"
- 50 x 35 x 13 mm

Volume

- 1.3 cubic inch
- 16.83 cubic cm

Weight

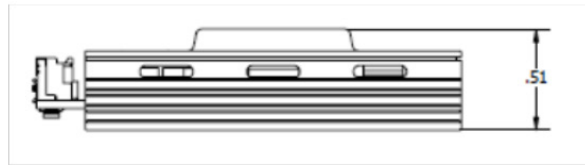
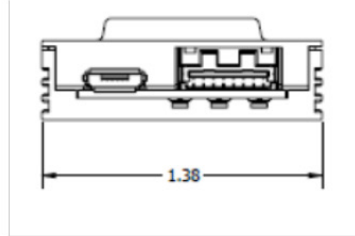
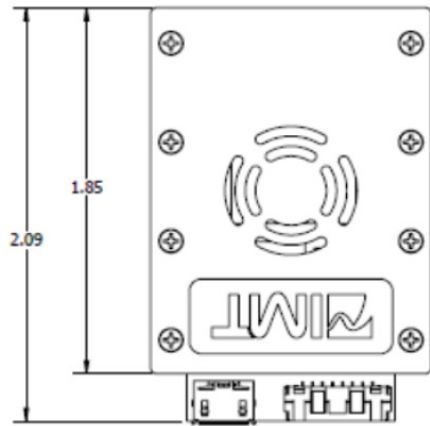
- < 1.2 ounces (34 grams)
- < 1.2 ounces (38 grams) with antenna



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Outline



Connectors



SDI Version

HDMI Version

Connector	Description	Type
1	SDI Input	MMCX - Male
2	Wi-Fi Output	Embedded
3	RF/900MHz Output	MMCX - Mae
4	Program/Remote Control	microUSB
5	Power - Serial Port	Molex - 01568-0807
6	Camera Control	JST_SM06B-SURS-TF-6PIN

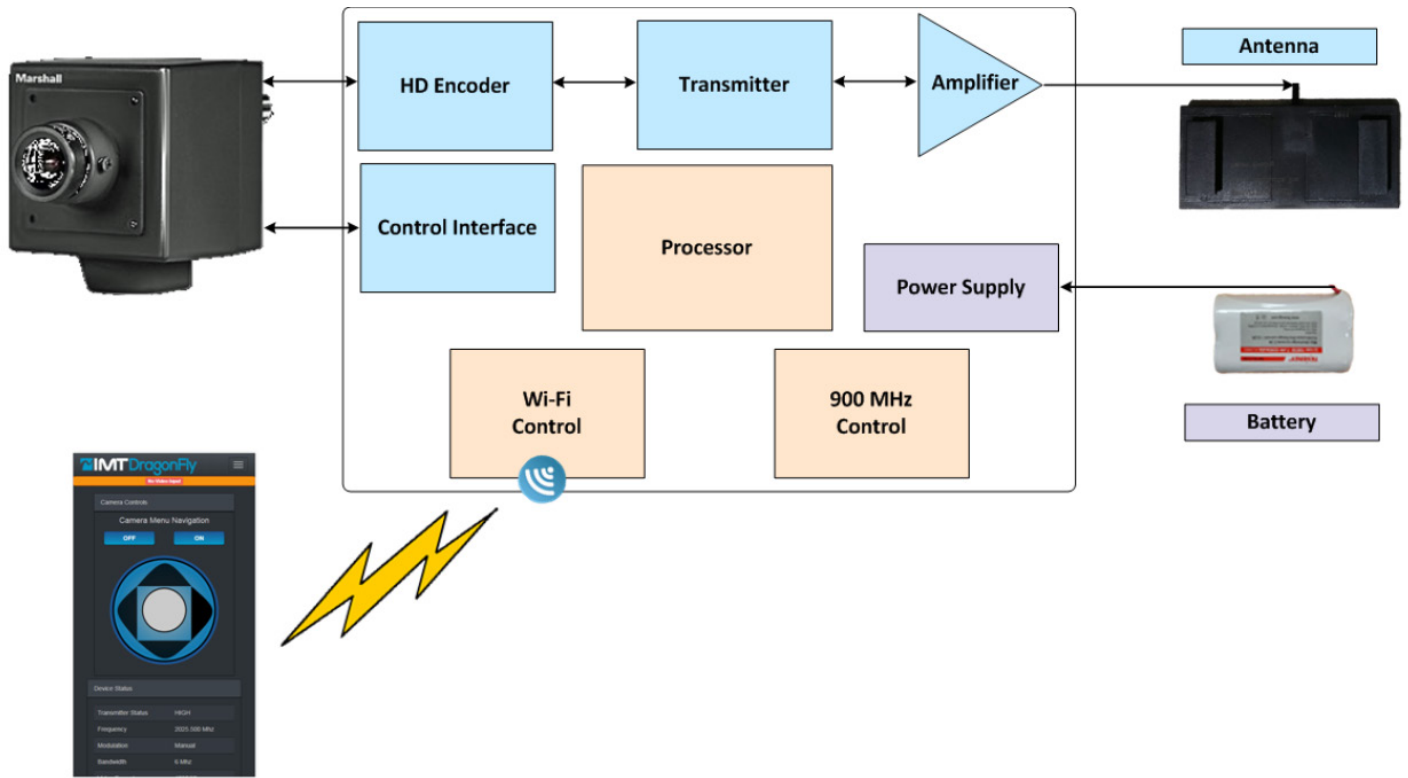
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Block Diagram



Wi-Fi Control

