

MicroLite 2

HD COFDM Wireless Transmitter

The MicroLite 2 is a superior wireless transmitter designed to capture real-time, high-quality video from cameras for electronic news gathering, sports, and entertainment applications. The transmitter features HD/SD-SDI and HDMI inputs with COFDM transmission in a small, lightweight chassis.

The MicroLite 2 delivers up to 250 mW of power in a small package, providing long-range, reliable HD video transmission.

The MicroLite 2 is a compelling choice when broadcast quality, exceptional range, and reliability are required. IMT's COFDM technology ensures the transmission of uninterrupted, live TV pictures over long ranges, despite the effects of foliage, challenging terrain, buildings, and other common non-line-of-sight limitations. This gives the MicroLite 2 a significant advantage over uncompressed solutions.

An additional benefit of the MicroLite 2, compared to alternative solutions, is the ability to operate at latency levels as low as 70 ms, making it well-suited for live sporting events and video assist applications.

The MicroLite 2 was designed with a compact size and weight form factor, and minimized power requirements, making it ideal smaller cameras and batteries. The MicroLite 2 operates with both 7.4 VDC camera lithium ion batteries as well as VClip-style batteries.

The MicroLite 2 may be configured or remotely controlled by the built-in Wi-Fi Web server. An Android or iOS device will see the MicroLite 2 and automatically open the control browser. A 900 MHz transceiver, enabling processing of remote commands, is also an option.



Runs for more than two hours off a 7.4 V Li-Ion battery!

Applications

- Sporting Events
- Steadicam
- Event Coverage
- Drones

Options

- S-Bus, RS232, and RS485 for control
- VClip or GM Battery Adaptor

Key Features

- Range over 2 miles Line-of-Sight
- Lightweight
- HDMI and SDI camera inputs
- HDMI and SDI video outputs
- Internal ISM and GPS anti-jam filter
- Broadcast-quality video transmission
- Licensed and ISM frequencies
- Low latency <70 ms
- Wi-Fi Remote Control
- Transceiver for Telemetry Data

SPECIFICATIONS

RF Performance

Base Model Number	Frequency (GHz)	Power Out (W)
23ML2	2.0 - 2.5	250
33ML2	3.1 - 3.5	250
55ML2	5.0 - 6.0	250
23/55ML2	2.0 - 2.5 5.1 - 6.0	250

Tuning Step Size

- 250 kHz step size

Frequency stability

- ±10 ppm

Modulation Modes

DVI-T (Standard)

- Bandwidth: 5, 6, 7, & 8 MHz
- Constellation: QPSK, 16QAM

DVB-T (Optional)

- Bandwidth: 5, 6, 7, & 8 MHz
- Constellation: QPSK, 16QAM

LMS-T (Optional)

- Bandwidth: 3, 4, 5, 6, 7, & 8, & 10 MHz
- Constellation: QPSK, 16QAM

MPEG Encoder

Video

- Video Coding: MPEG-4 Part 10/H.264
- Video I/O: HD/SD SDI
- Video Formats: 720p 24/25/59.94/60
1080i 24/25/59.94/60

Audio

- Audio Input: Embedded, SDI/HDMI
- Audio Coding: MPEG 1 (Layer II)
- Audio Sample Rate: 48 KHz

Control

Local

- OLED/Joystick

Wireless

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

900MHz

- Transceiver ISM band
- RS485/422
- S-Bus

Web Page

Settings

- Frequency
- Bandwidth
- Modulation

Status

- Power, Frequency
- Battery Run Time Meter

Alarms

- Power
- Video
- Battery

Power Requirements

Input Range

- 6.5 – 17 volts DC
- Integrated Battery Adapter

Power Consumption

- <8 Watts

Environmental

Temperature

- 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

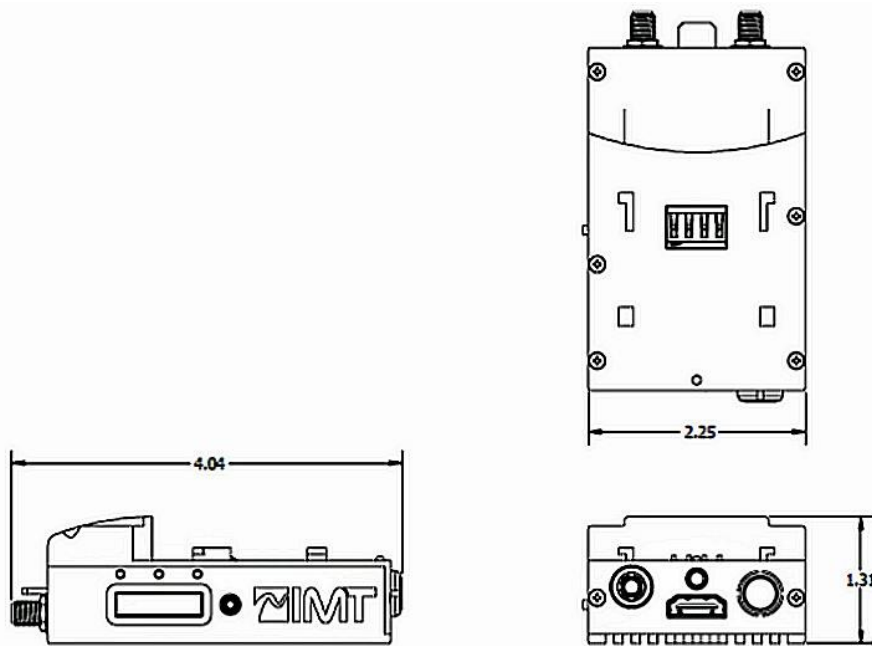
Size

- 4.04 (D) x 2.25 (W) x 1.31 (H) inches
- 102 (D) x 57 (W) x 33 (H) mm

Weight

- <6.5 ounces (185 grams)

Outline



Connectors

Reference	Name	Description	Physical Type
1	RF Output	N-Male	SMA-Male
2	Video In #1	SDI	BNC-Male
3	Video In #2	HDMI	HDMI
4	Power In	6 – 17 VDC	Battery Plate
5	Audio In	Embedded - SDI/HDMI	BNC-Male/HDMI
6	Data	RS232	LEMO
7	900 MHz RF	900 MHz RF	SMA Male
8	900 MHz Data	External Control Data	LEMO
9	Wi-Fi	Remote Control	Embedded

Wi-Fi Control

Screenshots of the IMT web interface showing Transmission Mode, Device Status, and Settings for Transmit.