Overview

The M2-D is a 3rd generation micro stabilized gimbaled camera equipped with

- Visible camera EO
- Thermal camera FLIR
- Gimbal
- Stabilization
Channels

• Visible channel
  • PAL / NTSC day camera
  • Zoom : x6.8 + x2 digital (x13.6 total) , continuous zoom
  • HFOV : 30° WFOV – 4.7° WFOV – 2.3° DFOV

• Thermal channel
  • PAL / NTSC thermal camera
  • Resolution: 640 x 512 / 384 x 288
  • LWIR uncooled 7-14µm
  • Zoom : x4/2 digital, continuous zoom
  • HFOV (640x480) : 32° W.FOV - 7° D.FOV , continuous zoom
  • HFOV (384x288) : 28° W.FOV - 13° D.FOV , continuous zoom
Characteristics

- Range of rotation
  - Pan: -180° to +180° continuous
  - Tilt: -45° to 135
- Angular Velocity: Up to 105deg/sec
- Power Requirement: 9-32 VDC
- Power Consumption: <10W
- Temperature: -20°C [-4°F] to +55°C [131°F]
- Dimensions:
  - Diameter: 53mm [2.099”]
  - Height: 78mm [3.07”]
- Weight: 160 grams [5.5 oz.]
Range of Rotation

-180deg to +180deg

45deg

180deg
M2D Control

Executing SPI M2D Camera Control Application

RS-232 (12V level)

Platform

SPI Camera Control Protocol

M2-D Supports both SPI Legacy Protocol & SPI 3rd-Gen Protocol
M2D Control

Executing
SPI M2D
Camera
Control
Application

Video Compression
IP Adapter

Platform

Video Compression
IP Adapter
PWM / SBUS Adapter

![Diagram of PWM and SBUS Adapter](image)
SBUS Adapter – Lightbridge – Remote Control

Control

Lightbridge GroundSystems

Lightbridge AirSystem

S.Bus Adapter

Platform

HDMI Display

Android & iOS Devices

Video Harness

DBUS Harness
Accessories

- Video Tracking
- Video Compression IP Adapter
- Mounting
- PWM Adapter
- S.Bus Adapter
- Retracting
## Control Modes & Mounting

### Legacy Mode - Camera Controls

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<tr>
<th>Mandatory</th>
<th>Optional</th>
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<td>Yaw</td>
<td>Freeze</td>
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<td>Sensitivity</td>
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<tr>
<td>Zoom</td>
<td>Go to Center</td>
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<tr>
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### Single YAW-AutoROLL Mode - Camera Controls

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### Mounting Options
- Vertical Mount
- M2D H Mount
- 3-axis Stabilization