

# M2D EO / FLIR



# Overview

The M2-D is a 3<sup>rd</sup> generation micro stabilized gimbaled camera equipped with

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

**BEST  
PRICE  
GUARANTEE**



# 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 7-14 $\mu$ m
  - 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

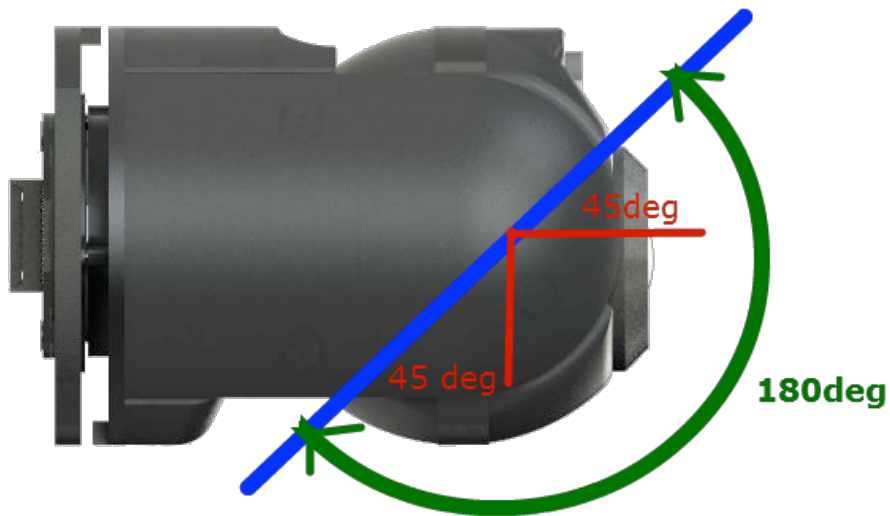


# Characteristics

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



# Range of Rotation



# M2D Control

Executing  
SPI M2D  
Camera  
Control  
Application



RS-232 (12V level)



**Platform**

RS-232 (12V level)

SPI Camera  
Control Protocol

M2-D Supports both  
SPI Legacy Protocol  
&  
SPI 3<sup>rd</sup>-Gen Protocol

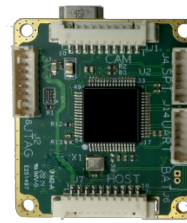


# M2D Control

Executing  
SPI M2D  
Camera  
Control  
Application



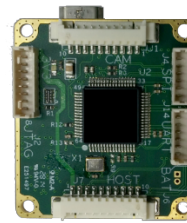
IP Link



Video Compression  
IP Adapter

Platform

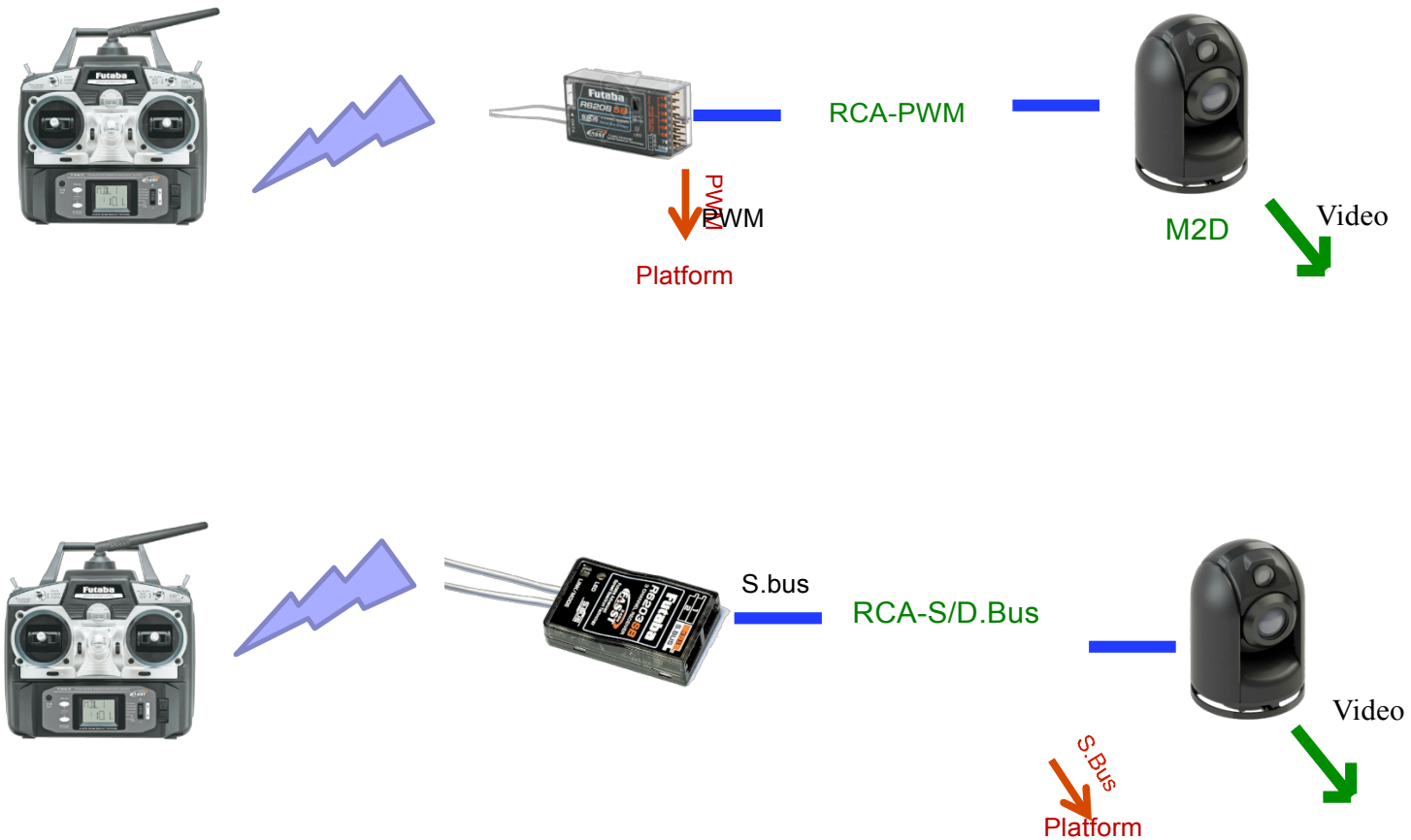
IP Link



Video Compression  
IP Adapter



# PWM / SBUS Adapter

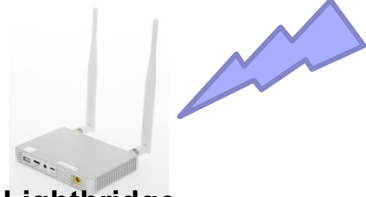




# SBUS Adapter – Lightbridge – Remote Control



Control



Video Lightbridge GroundSystems



Lightbridge AirSystem

S.Bus Adapter

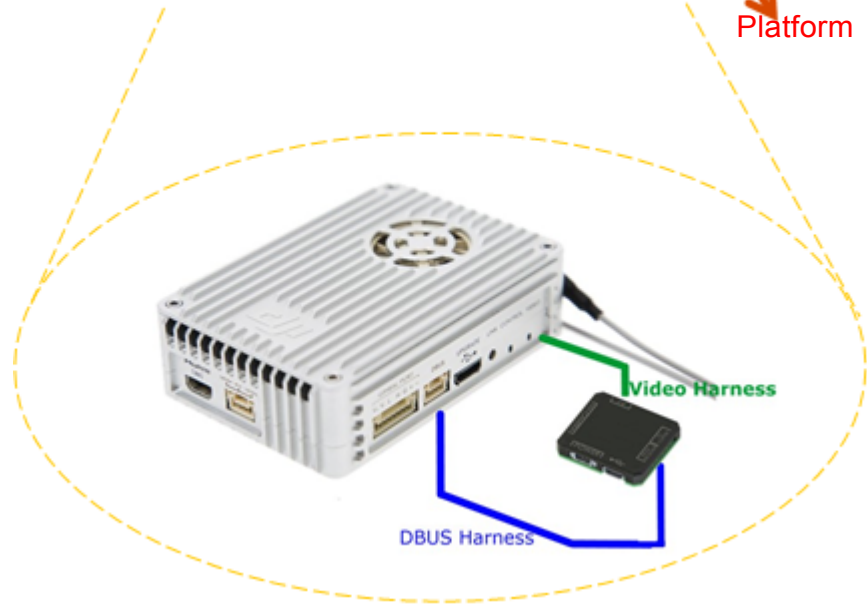


HDMI Display

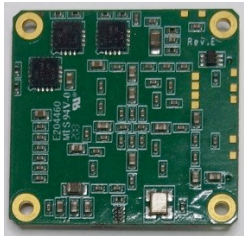


Android & IOs Devices

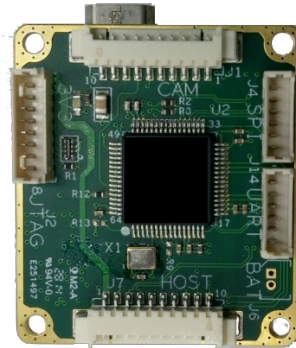
D.Bus Platform



# Accessories



Video Tracking



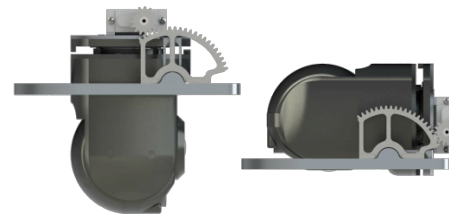
Video Compression  
IP Adapter



Mounting

PWM Adapter

S.Bus Adapter



Retracting



# Control Modes & Mounting

Legacy Mode - Camera Controls	
<i>Mandatory</i>	<i>Optional</i>
<ul style="list-style-type: none"> <li>• <input type="checkbox"/> Yaw</li> <li>• <input type="checkbox"/> Pitch</li> <li>• <input type="checkbox"/> Zoom</li> <li>• <input type="checkbox"/> DAY / IR / NUC</li> </ul>	<ul style="list-style-type: none"> <li>• <input type="checkbox"/> Freeze</li> <li>• <input type="checkbox"/> Sensitivity</li> <li>• <input type="checkbox"/> Go to Center</li> </ul>



Vertical Mount

SingleYAW-AutoROLL Mode - Camera Controls	
<i>Mandatory</i>	<i>Optional</i>
<ul style="list-style-type: none"> <li>• <input type="checkbox"/> Pitch</li> <li>• <input type="checkbox"/> Zoom</li> <li>• <input type="checkbox"/> DAY / IR / NUC</li> </ul>	<ul style="list-style-type: none"> <li>• <input type="checkbox"/> Freeze</li> <li>• <input type="checkbox"/> Sensitivity</li> </ul>

3-axis  
Stabilization



M2D H Mount