

## **Butterfly HDMI+HD-SDI™ – 2.2 Megapixel Day/Night Mini Camera**

### **Features**

- 2.2 Megapixels
- Full HD (1920x1080@30 fps) and HD (1280x720@60 fps)
- Output: HDMI, HD-SDI (720p 60 and 1080p 30), or Composite (CVBS)
- 1/3 inch Panasonic CMOS sensor
- Image enhancement with DNR (Digital Noise Reduction) and WDR (Wide Dynamic Range)
- Progressive Scan
- Day/Night mode and auto-switch
- Ideal for Low Light Conditions – Minimum Illumination is 1.0 Lux for Color, 0.05 Lux in Night Mode
- Compact Size – 2.48 Inches High (63 mm)
- OSD (On Screen Display)
- C/CS Mount
- Aluminum Housing
- CE and RoHS Certified

### **Applications**

- Surveillance
- Military
- Live Evening Events – Sports, concerts, etc.
- Reality TV
- Industrial applications – Low light conditions
- Medical/Scientific Imaging



**2.2 Megapixel, 1080p, 1/3 Inch Day/Night CMOS Progressive Scan HD Camera with HDMI, HD-SDI, and Composite Output. Features 32x Zoom. Compact Size – 2.48 Inches High (63 mm). For Surveillance, Military, and Broadcast.**

### **Overview**

HDMI is proven technology evolved from the broadcast industry, supporting up to Full HD resolution (1920 x 1080) at 30 FPS over standard cables.

HD-SDI is uncompressed digital video over coaxial cables with virtually no latency.

HD-SDI offers 6 times the resolution of analog and in many cases existing cable infrastructure can be reused. It supports up to 300 feet over standard RG59 and with low-cost repeaters it supports well over 1000 feet.

This camera uses a 1/3 inch 2.2 megapixel Panasonic sensor and is able to create a picture with 16,777,216 colors at 30 full HD frames per second.

## Specifications

### Video

<b>Image Sensor</b>	1/3 inch 2.2 megapixel Panasonic CMOS sensor
<b>Total Pixels</b>	2010 (H) x 1108 (V)
<b>Active Pixels</b>	1944 (H) x 1092 (V)
<b>Scanning System</b>	Progressive
<b>Resolutions</b>	Digital 1920x1080 (1080p30), 1280x720 (720p60), Analog 700TVL
<b>Minimum Illumination</b>	Color 1.0 lux; B/W 0.5 lux; Color DSS 0.002 lux; B/W DSS 0.001 lux
<b>S/N Ratio</b>	>50db (AGC off)
<b>Video Output</b>	HD-SDI, HDMI, or Composite

### Lens

<b>Lens Mount</b>	C/CS Mount
<b>Shutter Speed</b>	Auto / Manual (1/30 or 1/25 ~ 1/60,000)

### Operational

<b>On Screen Display</b>	English
<b>OSD Text</b>	0 ~ 9, A ~ Z, a ~ z
<b>DSS (Digital Slow Shutter)</b>	OFF, x2, x3, x4
<b>AGC (Automatic Gain Control)</b>	OFF / ON
<b>WDR / BLC</b>	OFF / WDR / BLC
<b>Day / Night</b>	Auto / Day / Night / Ext
<b>Smart IR</b>	OFF / ON
<b>White Balance</b>	Auto / Preset / Manual / Indoor / Outdoor
<b>Sharpness</b>	0 ~ 10 steps
<b>Mirror</b>	OFF / H / V / H&V
<b>Freeze</b>	OFF / ON
<b>Digital Zoom</b>	32x
<b>HLC (High Light Compensation)</b>	OFF / ON
<b>ACE (Advanced Contrast Enhancement)</b>	OFF / ON
<b>DNR (Dynamic Noise Reduction)</b>	OFF / Low / Middle / High / Auto
<b>D. Compress</b>	OFF / ON
<b>Privacy Mask</b>	OFF / ON (32 points)
<b>Motion</b>	OFF / ON (4 points)
<b>Shade Detection</b>	OFF / ON
<b>Shading</b>	OFF / ON
<b>Defect Detection</b>	OFF / ON
<b>Defog</b>	OFF / ON
<b>Pattern Generator</b>	OFF / ON
<b>CVBS (Composite Out)</b>	OFF / ON

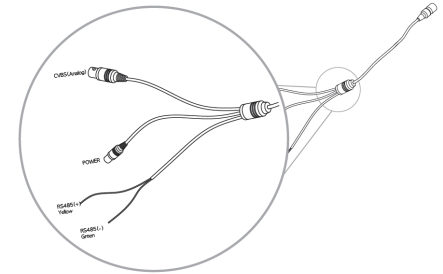
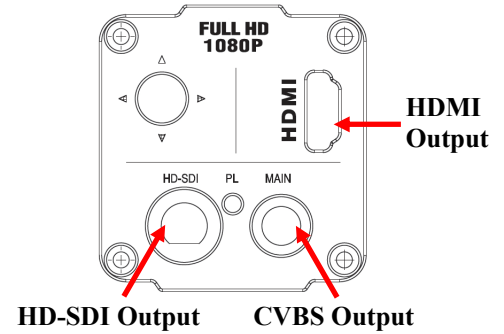
### Communication

<b>ID</b>	1 ~ 255
<b>RS-485</b>	Baudrate: 2400, 4800, 9600, 19200, 38400, 57600, 115200
<b>Protocol</b>	Pelco-P; Pelco-D

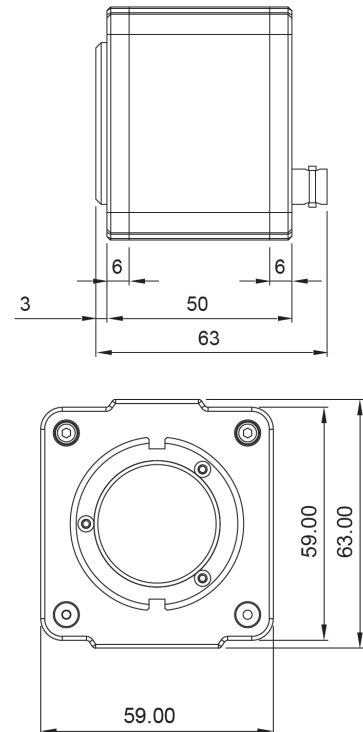
### Physical and Power

<b>Input Voltage and Current</b>	12VDC ±10%; 250mA
<b>Maximum Power Consumption</b>	3 watts
<b>Operating Temperature</b>	-10°C ~ +50°C, 0% ~ 80% Relative Humidity
<b>Storage Temperature</b>	-20°C ~ +60°C, 0% ~ 90% Relative Humidity
<b>Housing</b>	Aluminum Housing
<b>Dimensions</b>	59 mm W x 63 mm H x 80 mm L 2.32" W x 2.48" H x 3.15" L
<b>Weight</b>	Approximately 40 grams (1.41 ounces)
<b>Certifications</b>	FCC, CE, RoHS

## Connectors



## Camera Drawings



## Ordering Information

**Butterfly HDMI+HD-SDI: 2.2 Megapixel Mini Camera (Lens not included)**