

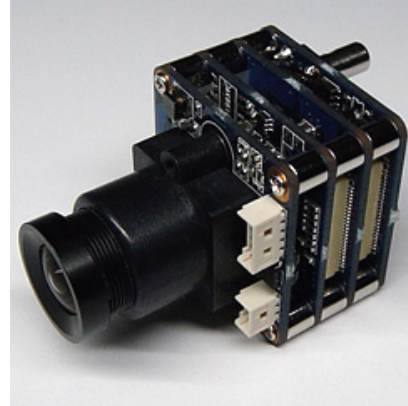
## **IOTA II™ – Miniature 1080i 60 fps or 59.94 50 fps OEM HD-SDI Camera**

### **Features**

- Miniature 1080p HD camera
- Output: HD-SDI
- 1/2.8" CMOS Sensor
- 2.2 Megapixel High Resolution
- Resolutions:
  - 1080i 60, 50, or 59.94 fps
  - 1080p 30 or 25 fps
  - 720p 60, 30, or 25 fps
- Maximum 1,944 x 1,104 resolution (full HD mode)
- 26 x 26 x 16.8 millimeters – just over one inch long
- Extremely light weight – only 15 grams (.529 ounces)
- WDR (Wide Dynamic Range): Allows a camera to filter the intense back light surrounding a subject and thus enhances the ability to distinguish features and shapes on the subject.
- Auto or manual white balance
- Low power consumption – maximum 200mA

### **Applications**

- Reality TV
- Concerts/Live events
- Machine Vision (Semiconductor, Automotive)
- Medical (Microscopy, Dental Medicine)
- Sport Science (Motion Analysis, Physical) POV
- Situational Awareness for Military/Law Enforcement



**2.2 Megapixel, 1080p, 26 Millimeters/1.02 Inches CMOS Color HD Camera with Maximum 60 fps@ 1944 x 1104. Weighs Just over One Half Ounce. For Broadcasting, Machine Vision, Industrial, Robotics, Military/Law Enforcement, and Medical/Science Applications.**

The IOTA II is a full HD 2.2 megapixel 1/2.8 inch CMOS color camera module that offers full 1080i video at up to 60 frames per second, plus broadcast standard video – 1080i at 59.94 fps. Its ultra-sharp video is perfect for applications demanding high-resolution images including Broadcast/Multimedia, Machine Vision, Industrial, Robotics, Medical, Military/Law Enforcement, and OEM.

Measuring an ultra compact 26mm x 26mm x 16.8mm, the IOTA II is one of the smallest and lightest full HD modules available on the market today. It weighs just over half an ounce.

Video enhancement features such as Wide Dynamic Range (WDR) deliver superb sensitivity and visibility even in challenging lighting environments. This board-level camera packs high performance in an ultra compact design that users love, giving it the flexibility to be easily adapted into any application.

## Connector Output

Pin Number	Signal Names	Function
1	GND In	Ground
2	RxD	RC232C Rx
3	TxD	RC232C Tx
4	GND In	Ground
5	+12V In	Power In

## Specifications

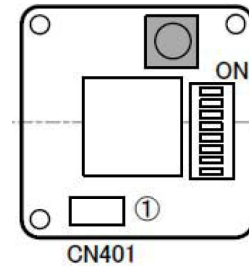
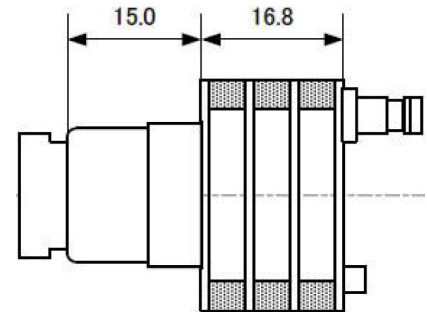
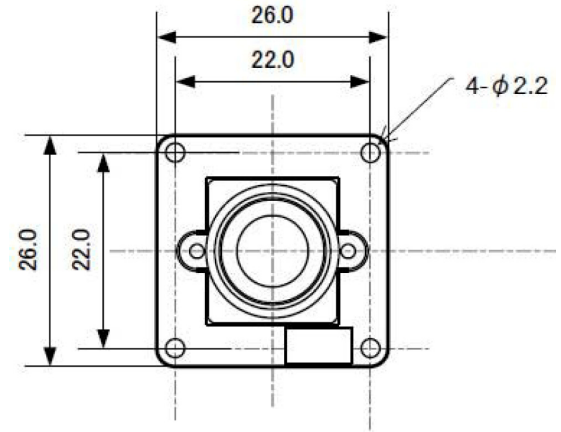
### General Specifications

<b>Image Sensor</b>	1/2.8 inch CMOS Sensor
<b>Effective Pixels Number</b>	1,944 (H) x 1,104 (V), 2.15M Pixels (Full HD)
<b>Total Number of Pixels</b>	1,952 (H) x 1,116 (V), 2.18M Pixels (Full HD)
<b>Pixel Size</b>	2.80 $\mu\text{m}$ x 2.80 $\mu\text{m}$
<b>Video Output Modes</b>	1080i 60, 1080i 59.94, 1080i 50, 1080p30, 1080p 25, 720p 60, 720p 30, 720p 25
<b>Video Output</b>	HD-SDI
<b>White Balance</b>	Auto/Hold/User
<b>Electronic Iris</b>	1/60 - 1/10,000
<b>Sync System</b>	Internal

### Physical and Power

<b>Power Source</b>	DC12V $\pm$ 10%
<b>Max. Power Consumption</b>	200mA (12V)
<b>Operating Temperature</b>	-10°C ~ +45°C
<b>Operating Humidity</b>	Below 80% (No condensation)
<b>Dimensions (WxHxD)</b>	26 x 26 x 16.8 millimeters 1.66 x 1.14 x 1.14 inches (Connector excluded)
<b>Weight</b>	15 grams (0.529 ounces)

## Camera Drawings



## Ordering Information

**IOTA II: Miniature 2.2 Megapixel HD Camera**