

#### High resolution digital CCD detector **ISA011**

CCD type, GigE I/F high resolution digital CCD detector. Best suits for beam profile measurement in 400nm - 1100nm wavelength.

#### [Product summery]

ISA011 is high resolution & high performance digital CCD detector for 400nm -1100nm wavelength range.

Imaging device is 1/2inch interline CCD, having high resolution of 1392 x 1040 pixels. In combination with Synos' optical measurement optics **M-Scope** series and optical beam analysis module AD013D, it has wide application field such as optical beam profile analysis of various optical device and module such as optical laser diodes, optical fiber, polymer waveguide for OPCB substrate, optical connector, etc. in 400-1100nm wavelength range.

#### (Feature)

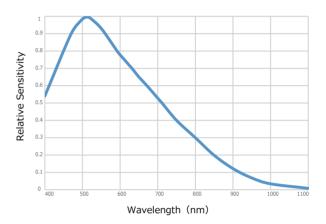
- \* High resolution type 1/2inch digital CCD detector for 400-1100nm wavelength range
  - High resolution of 1.4M pixels /1392 x 1040 pixels
  - Max. 12bit gradation
- \* Gigabit Ethernet I/F
  - Gigabit Ethernet I/F is adopted as detector control I/F. Direct and easy connection with various personal computer without special hardware.

#### [Summery of specification]

Summery of specification ,	/ Imaging device
Imaging device	1/2inch interline CCD
Spectral range	400nm - 1100nm
Pixels number	1392 x 1040 pixels / 1.4M pixels
Sensor pitch	4.65 x 4.65μm
Summery of specification ,	/ Detector
Detector control I/F	Gigabit Ethernet (1000BASE)
Frame rate	20fps
Exposure time control	4µsec - 60sec
Gradation	8/12bit (12bit ADC)
Dinamic range	54dB以上 (typical)
Camera mount	C mount
Power consumption	4W or less
Power supply	8 - 30VDC
Operation environment	+5℃ - +50℃



#### [Spectral sensitivity]



# High resolution glassless type digital CCD detector

**ISA031** 

High resolution & high performance glassless type digital CCD detector, especially good for laser beam observation.

#### [Product overview]

ISA031 is high resolution & high performance glassless type digital CCD detector for visible - 1100nm wavelength range, especially good for laser beam observation. It is best for optical measurement using high coherency light source due to adopting glassless type CCD chip developed mainly for laser beam analysis and therefore have a slight influence of interference fringe. In combination with Synos' optical measurement optics **M-Scope** series and optical beam analysis module AP013D, it is widely applicable for various optical beam observation and beam profile analysis application in visible - 1100nm wavelength range.

- \* Glassless type 2/3inch CCD detector for visible 1100nm wavelength range, slight influence of interference fringe in laser observation.
- \* High resolution of 1.4M pixels (1392 x 1040 pixel)
- \* High output gradation of max. 10bit
- \* Camera link I/F
  - Following Camera Link Base Configuration standard as camera I/F.

#### [Summery of specification]

Summery of specification / Imaging device	
Imaging device	2/3inch glassless type interline CCD
Spectral range	400nm - 1100nm
Pixels number	1392 x 1040 pixels /1.4M pixels
Sensor pitch	6.45 x 6.45µm
Summery of specification / Detector	
Detector control I/F	Camera link Base Configuration standard
Frame rate	Non interlace: 15fps
Gamma	1 (fixed)
Erectronic shutter	1/12000-1/15sec continuity/random mode
Gradation	10bit
Dinamic range	50dB以上
Mount	C mount
Power supply	DC12V±10% / max. 400mA
Operation environment	0℃ - +40℃



ISA003U USB CCD camera (for image observation)

### [Product overview]

ISA003U is a small size USB 2.0 type high resolution B/W CCD camera, suits for image observation and processing etc.



## [Summery of specification]

- \* Imaging device 1/2inch B/W interline CCD
- \* Effective pixels number 1360 x 1024 Pixels
- \* Spectral range 400 1100nm
- \* Signal output USB2.0
- \* Gradation 8/10/12 bit \* S/N approx. 56dB