



MODEL SI-M100

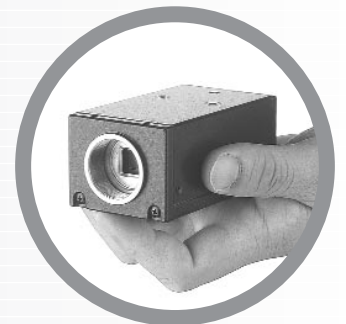
MEGA PIXEL PROGRESSIVE SCAN CAMERA



The model SI-M100 is a high-resolution machine vision camera. It is based on the progressive scan technology, featuring high performance and versatile functions within a tiny and robust package. Over a million pixels (1.3K x 1K) in 2/3" CCD format provide extremely high resolution for discerning the finest details. The SI-M100 is user-friendly with all switch settings on the rear panel. Full frame shuttering with asynchronous random trigger function achieves real time dynamic image capturing. The SI-M100 is an ideal monochrome machine vision camera for applications in medical/scientific imaging, character/pattern recognition, definition graphics and many others.

FEATURES

- Monochrome mega pixel progressive scan camera
- High resolution 2/3" CCD sensor Sony
- 1300(H) x 1030(V) x 6.7 mm square pixels
- C Mount
- Robust and compact
- Asynchronous reset
- High sensitivity 0.1 Lux, F1.4, AGC on
- Excellent S/N ratio >56db
- 11 step Shutter 1/12 to 1/10,000
- 5:4 ratio aspect
- 5 step longtime exposure
- HD and VD in/out, WEN and pixel clock possible
- Pixel synchronized image transfer possible
- User friendly Switches on rear for easy mode settings
- RS 232C serial interface (Windows NT)



Our people make a difference.

Choice. Value. Service.

MODEL SI-M100

Specifications for SI-M100

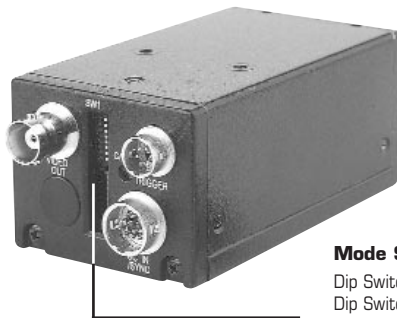
Specifications

SI-M100E/M100C

Picture Elements	1300(H) x 1030(V) effective pixels
Cell Size	6.7(H) x 6.7(V) mm
CCD Sensor	Monochrome 2/3" CCD Interline Transfer
Scanning System	Progressive Scan
Pixel Clock	20.25 MHz
Line Frequency	12.53 kHz (1616 pixel clock/line)
Frame Rate Normal	12 frames/sec. (1044 lines/frame)
Frame Rate Double Speed	24 frames/sec. (522 lines/frame) (Vertical pixel binning)
Sensing Area	8.7(H) x 6.9(V) mm
Resolution (Horizontal)	1040 TV lines
Normal (Vertical)	1030 TV lines
Double Speed (Vertical)	515 TV lines
Pixel Clock Out	3.5-4.5V, 150 Ohm terminated
Gamma	0.45-1.0
Gain	Auto/Manual
Gain Range	-3 dB to +18 dB
Video Output	0.7 Vpp, 75 Ohm
S/N Ratio	>56db
Sensitivity	0.1 Lux, F1.4, AGC on
Spectral Sensitivity	380 - 900 nm
Synchronization	Internal X-tal. or external HD/VD
HD/VD In	3-5 Vpp, 75 Ohm terminated
Trigger In	TTL 2-5V
SG In	TTL 2-5V
HD/VD Out*	3.5-4.5V, 150 Ohm terminated
WEN Out*	3.5-4.5V, 150 Ohm terminated
Shutter	1/12, 1/24, 1/50, 1/100, 1/200, 1/400, 1/800, 1/1500, 1/3000, 1/6000, 1/10,000 sec.
Long Time Exposure	1/6, 1/3, 1/2, 1, 2 sec.
External SG In	Variable shutter 1/10,000 to 2 seconds
Camera Set-up	Shutter, Read-out system, Gain, Control
Switches on Rear	Serial Control To be defined
Temperature	-10°C to +45°C
Humidity	20-80% non-condensing
Power	12V DC±10% 5.4W
Lens Mount	C-mount
Dimensions	40(H) x 50(W) x 90(D) mm
Weight	250g

*) HD sync. VD sync. / (Trigger) input or output by internal straps. Inputs TTL or 75 Ohm terminated by internal straps.

Mode Select Switch

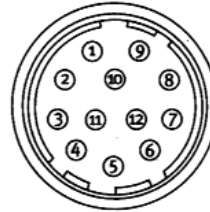


Mode Select Switch

- Dip Switch 1-4: Shutter
- Dip Switch 5: Read Out
- Dip Switch 6, 7: Ext. Trigger
- Dip Switch 8: RS232 Interface
- Dip Switch 9-16: Reserved

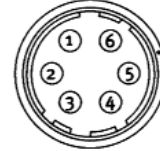
Connection Description

DC-IN/SYNC.



- Pin 1 Ground
- 2 +12V DC power
- 3 Ground
- 4 Video out
- 5 Ground
- 6 HD in/out*
- 7 VD in/out
WEN out*
- 8 Ground
- 9 Pixel clock out*
- 10 Ground
- 11 +12V DC
- 12 Ground

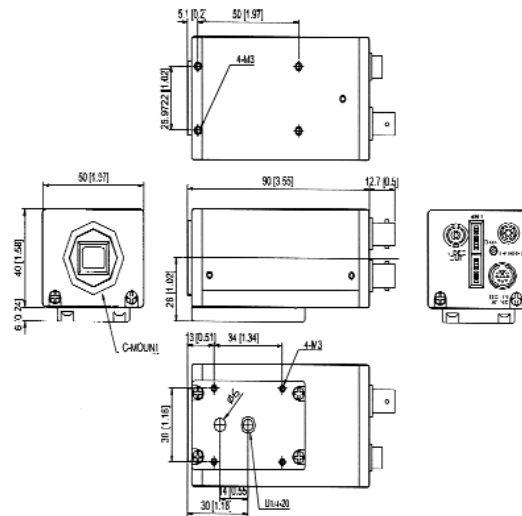
RS 232C/TRIG.



- Pin 1 TXD
- 2 RXD
- 3 Ground
- 4 Ext. SG in
- 5 Trigger in
- 6 WEN out

RS 232C/TRIG.

Dimensions



Design and specifications subject to change without notice.

Conversion: 1" = 25.4mm
Measurement conversions are approximate