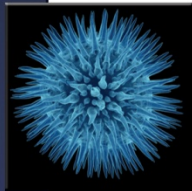
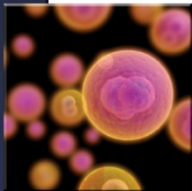




Precision CCD and EMCCD Cameras

SI-16M4-IT

4872 x 3248 Pixel CCD Camera 3.5 frames/second 12-bit camera



Salvador Imaging's SI-16M4-IT is a high-resolution, 16 Megapixel camera with on-chip electronic shuttering. This cost-effective camera comes in monochrome or RGB color versions and provides 12-bit digital data over a standard Camera Link interface. The SI-16M4-IT provides image data at up to 3.5 frames per second.

Electronic exposure control down to 100 microseconds allows the user to capture imagery under a variety of lighting conditions ranging from continuous illumination to pulsed laser light sources. An enhanced anti-streak option eliminates streaking with rapidly moving scenes captured with sub-millisecond exposure times in applications such as airborne mapping. Salvador ensures fully characterized performance with 100% testing of all cameras by using the Photon Transfer Curve method described on the website: www.salvaadorimaging.com/character

Applications

- Airborne Mapping
- Microscopy
- Semiconductor Device Inspection
- High resolution machine vision

Features

- 4872 x 3248 resolution, 3.5 fps
- 12-bit digitization
- 100:1 Anti-blooming
- Interline Frame Transfer for on-chip electronic shuttering
- Programmable operation (via serial port over Camera Link)

Trigger Modes

- (defined via serial commands)
- Free Run mode with defined integration time
- Trigger via Camera Link CC1 or SMA connector
- Positive going edge initiates integration
- Integration duration selectable:
 - Width of trigger pulse
 - Fixed to a programmed time duration
- Sync output pulse available on SMA (out)



Image Shown does not necessarily reflect "base" configuration

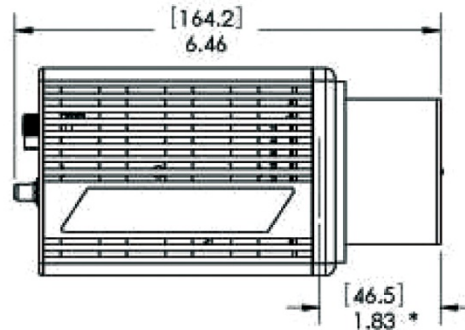
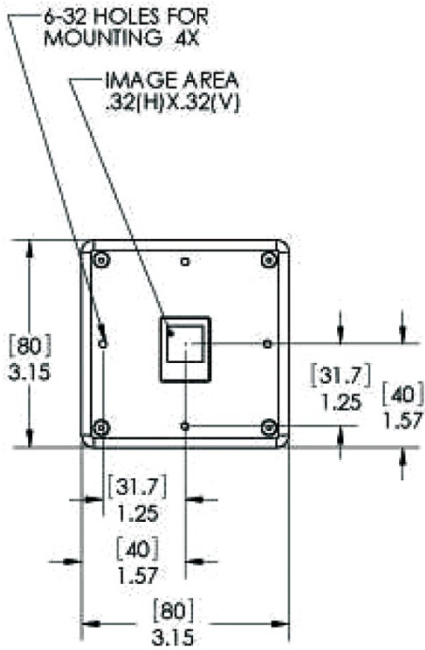
Specifications

Resolution	4872 x 3248 pixels
Pixel size	7.4um x 7.4um
Sensor format	Interline Transfer
Color/Monochrome	Monochrome & Color options
Pixel full well capacity	30 ke
Amp noise	40 e
Max. frame rate	3.5 fps
Pixel rate	30 Mhz/port x 2 ports
Data format	Camera Link (Base Config)
Dark signal	400 e /pixel/sec @ 25° C
Dynamic range	58 dB
Housing	Aluminum
Lens Mount	F-mount
Size	3" x 3" x 5"
Weight	1.5 lbs
Operating Temp	0° - 40° C
Power supply	+22 to +26 VDC or 110/220 VAC with AC/DC converter
Power dissipation	10 W
Electronic Shutter	100 usec – 270 msec

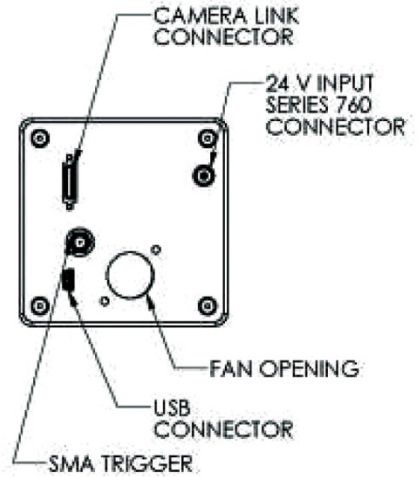
Connectors

Trigger/Sync	Selectable: Camera Link CC1 or SMA (in)
Data	Camera Link (Base Configuration)
Power	+22 to +24VDC
Programming	Serial port via Camera Link

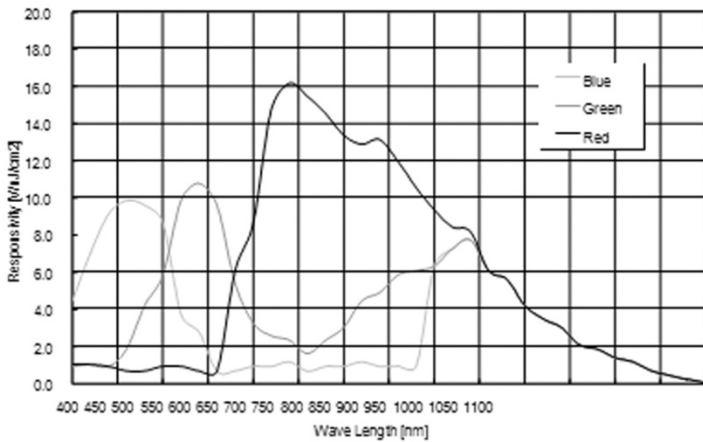
Package Drawing



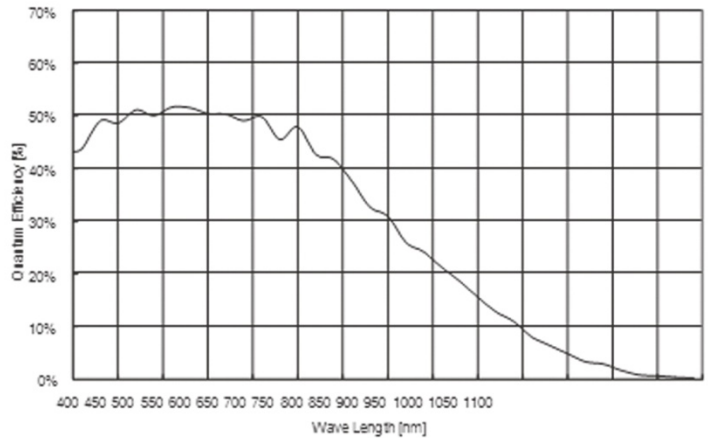
C-MOUNT AND F-MOUNT LENS AVAILABLE
F-MOUNT SHOWN



Units of measurement = inches
[Brackets = millimeters]
* = Optical distance



Typical Spectral Responsivity for Color Imager



Typical Spectral Quantum Efficiency without on-chip color filters

About Salvador Imaging

Salvador Imaging's camera technology combines the low-noise and high resolution needed for true analytical measurements with the speed demanded in today's medical, commercial/industrial, and aerospace/military imaging systems.

Salvador offers standard products as well as fully custom designs to meet the needs of a broad range of markets. Applications for Salvador products range from semiconductor, printed circuit-board and flat panel inspection to medical imaging, biotech data capture, airborne mapping, low light security and surveillance, and burst mode ballistic imaging. Camera products typically incorporate low noise, precision analog design coupled with proprietary thermal stabilization (cooling) to provide unrivaled imaging performance. Features such as binning, area-of-interest and external synchronization are standard in many Salvador cameras. Salvador cameras are 100% inspected using the Photon Transfer curve and other techniques to verify that the technical specifications are achieved.

SI-16M4-IT

Specifications and availability subject to change without notice – July 2008

10-10010-01-04

Precision CCD and EMCCD Cameras



SALVADORIMAGING™

WWW.SALVADORIMAGING.COM

5061 North 30th St., Suite 103
Colorado Springs, CO 80919
Telephone: 719.598.6006