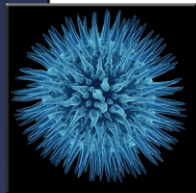
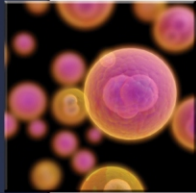




Precision CCD and EMCCD Cameras



SI-1M90-FT

**1K x 1K Pixel CCD Camera ■ High Speed Image Capture
90 Frames/Second ■ 12-Bit Digital Camera**

Salvador Imagings SI-1M90-FT is a high resolution monochrome camera providing up to 90 frames per second with 12-bit digital data. The frame transfer architecture has 100% fill factor for maximum light collection, and on-chip shuttering allows for imaging of dynamic scenes without the need for external shutter mechanisms. Vertical overflow drain structures in the CCD provide up to 1000:1 antibloom suppression to preserve image data even when glints or other bright objects are in the field-of-view.

Performance is ensured though Salvador's characterization of each unit coming through the production line using the Photon Transfer Curve method described on our web site -
[Http://www.salvadorimaging.com/character](http://www.salvadorimaging.com/character)



Features

- 1024 x1024 resolution, 60 fps or 90 fps selectable
- 12-bit digitization
- 1000:1 Anti-blooming
- Fast Frame Transfer with on-chip shuttering
- Programmable operation
(via serial port over Camera Link)
- Camera Link output

Applications

- High Speed Inspection
- Surveillance
- Machine Vision

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)

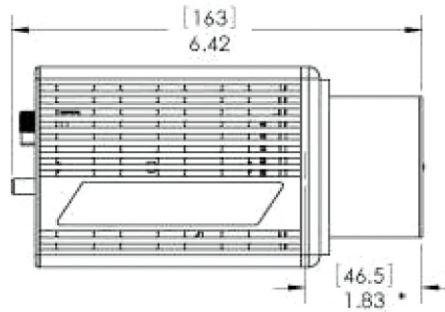
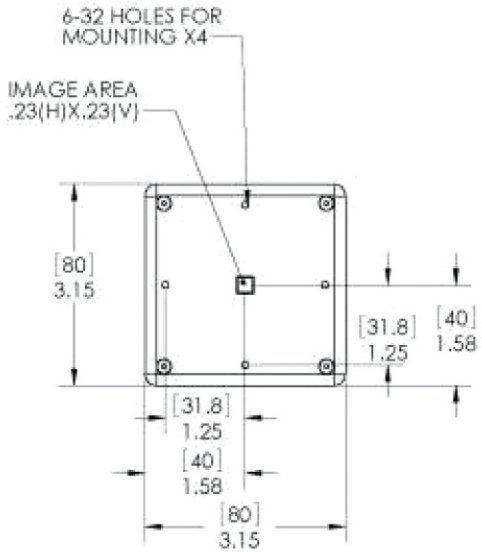
Specifications

Resolution	1024 x 1024 pixels
Pixel size	5.6µm x 5.6 µm
Sensor format	Frame Transfer 30 ke ⁻
Full well capacity	30 ke ⁻ @ 90fps, 45 ke ⁻ @ 60fps
Amp noise	30 e ⁻ @ 90fps, 22 e ⁻ @ 60fps
Max. frame rate	60/90 fps
Pixel rate	40/60 MHz/port x 2 ports
Data format	Camera Link (Base Config.)
Dark signal	10 pA/cm ² @ 25° C
Dynamic range	60 dB @ 90fps, 66 dB @ 60fps
Housing	Aluminum
Lens Mount	C-mount
Size	3" x 3" x 5"
Weight	1.2 lbs
Operating temp	0° – 40° C
Power supply	+24 VDC or 110/220 VAC with AC/DC converter
Power dissipation	18 W
Electronic Shutter	1 msec - frame time

Connectors

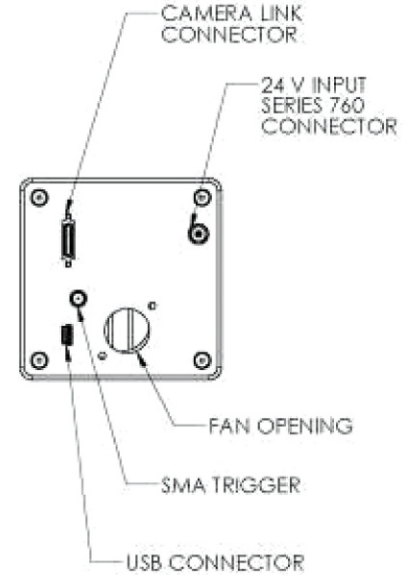
Trigger/Sync	Selectable: Camera Link CC1 or SMA (in)
Data	Camera Link (Base Configuration)
Power	110 VAC (220 VAC option) with AC/DC converter provided
Programming	Serial port via Camera Link

Package Drawing

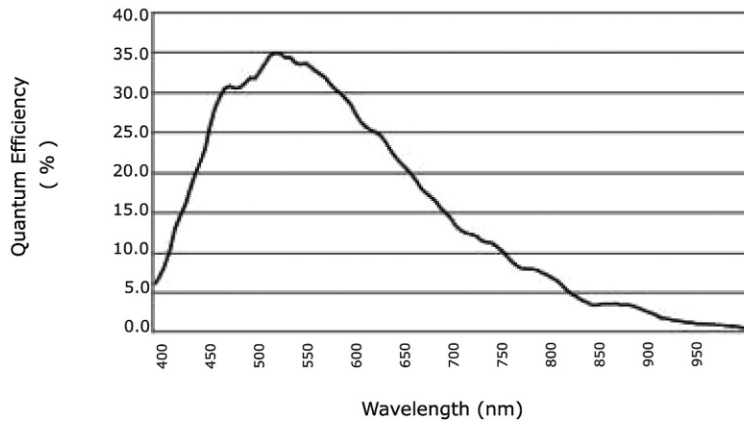


C-MOUNT AND F-MOUNT LENS AVAILABLE
F-MOUNT SHOWN

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



Typical Quantum Efficiency



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-1M90-FT

10-10011-01-04

Precision CCD and EMCCD Cameras



SALVADORIMAGING™
A PHOTON DYNAMICS COMPANY

WWW.SALVADORIMAGING.COM

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