

# Mega Speed<sup>®</sup> MS90K-SC

## 1 Mega Pixel High Speed Camera

4000 FPS @ 1280 x 800

14 micron pixels



### Specifications

Sensor type:	Color or monochrome CMOS sensor.	<b>Fully Synchronous Image Capture Capabilities, Sync in / Sync out IRI B, Pre/ Post Trigger Mode &amp; Segmented Trigger Mode.</b>
Image sizes:	User defined in software.	
Maximum resolution:	1280 x 800. 4/3" optical format..	
Minimum resolution:	64 x 2.	
Maximum speed	4000 fps at maximum resolution. Higher speed settings at reduced image resolutions.	
Pixel size:	14 micron x 14 micron square pixel.	
Shutter speed:	Global Shutter 2 us to 30 ms in 1 us steps.	
Spectral response:	400nm to 1000nm.	
ISO:	12,500 with boost on ( Monochrome).	
A-D converter:	8 bit.	
Trigger in requirement:	3 to 24 VDC, active high through BNC jack. Center pin positive or simple switch closure.	
Sync out:	TTL 3.3 VDC via BNC jack. Center pin positive active high on exposure.	
Trigger modes:	Software, Manual, Pre/Post, Segmented, Synchronized, Single Sequence or Snap Shot.	
IRIG B:	IRIG B frame embedded time stamp via BNC jack. Accuracy greater than 50 microsecond.	
Editing software:	Image analysis, data acquisition, object tracking, AVI editing & image compression.	
File saving:	User can save in RAW, AVI, JPEG, BMP, TIF, PNG or MP4 format to PC hard drive.	
Control software:	Mega Speed Camera Control software.	
Video pre-view:	Live 30 fps preview to host PC during set up and capture via Gigabit Ethernet.	
Camera memory:	16 GB DDR standard RAM or optional 32 GB DDR RAM.	
Data download:	Real time digital image review and analysis while downloading from camera memory to control PC.	
Playback rate:	User selectable in PC software from 1 to 500 fps for fast video review.	
PC requirements:	RJ 45 Gig E connection, Window 10, 64 bit, 2GHz, 16 GB RAM, 500 Gig HD.	
Networking:	All switches and hubs must be Gigabit Ethernet capable.	
Camera cable:	Requires Cat 6 Ethernet cable for PC connection and control.	
Lens mount:	Standard "C" mount. "F" and "G" mounts available.	
Camera size:	4.5" wide x 4" high x 4" long.	
Camera weight:	900g.	
Camera body:	Machined anodized aluminum.	
Power requirements:	120 or 240 VAC for camera power supply or 1.7 amps @ 11 - 13 V DC for direct connection.	
Shock Rating:	100g for 10 milli-seconds 10 times all ( 6 ) axis. Operational vibration meets 0.25g, from 5-500Hz.	
Temperature:	Operating temperature is -40° C to 40°C.	