Mega Speed MS100K ®

2 Mega Pixel Digital Camera

2000 FPS @ 1920 x 1080

High Resolution, High Speed
And High Quality Images At
Over 2000 FPS.

4 Channel Optional Data
Acquisition Module

Fully Synchronous Image Capture
Capabilities, Sync in / Sync out
IRIG B, Pre/ Post Trigger
Mode & Segmented Trigger Mode

High Capacity Camera Memory
Options Available.

Specifications

Sensor type:	Color or monochrome CMOS sensor.
Image sizes:	User defined.
Maximum resolution:	1920 x 1080.
Minimum resolution:	64 x 2.
Maximum speed	2000 fps at maximum resolution. Higher speed settings at reduced image resolutions.
Pixel size:	10 micron x 10 micron square pixel.
Shutter speed:	Global Shutter 2 us to 30 ms in 1 us steps with exposure time tags.
Spectral response:	400nm to 1000nm.
ISO:	12,500 with boost on (Monochrome).
A-D converter:	10 bit.

Trigger in requirement:	3 to 48 VDC, active high through BNC jack. Center pin positive. Optional switch closure.
Strobe out:	TTL 3.3 VDC via BNC jack. Center pin positive active high on exposure.
Trigger modes:	Software, Manual, Pre/Post, 32 Segmented, Synchronized, Single Sequence or Scripted.
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:	Setup and control via camera's back panel Gigabit Ethernet. Software DLL available.
Video pre-view:	Live 30 fps preview to host PC during set up and capture via Gigabit Ethernet.
Camera memory:	16 GB DDR and optional 480 GB SSD.
Data download:	Real time digital image review and analysis while downloading from camera memory to control PC.
Event tagging:	Frames in captured video are marked via the "Marker" or "ADC" input jacks.
Playback rate:	User selectable in PC software from 1 to 500 fps for fast video review.

PC requirements:	RJ 45 Gig E connection, Windows XP, 7, 8 or 10, 2GHz, 8 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 5" high x 6.25" long.
Camera weight:	3lbs.
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:	50g for 15 milli-seconds 10 times all axis. Operational vibration meets 0.25g, from 5-500Hz.