

LARGE FORMAT HIGH RESOLUTION HIGH SPEED CAMERA

Large 2560 x 2176 image format for both wide and tall recording applications.

Gathers more high resolution details than wide angle only image formats can.

Min FPS: 20			Record Time (Seconds)	
Width*	Height	Max FPS	32 GB RAM	64 GB RAM
2560	2176	1823	3.3	6.6
2560	1920	2,005	3.4	7.6
2560	1152	3,303	3.5	7.6
2560	1088	3,480	3.5	7.6
2560	1024	3,676	3.5	7.7
2560	832	4,423	3.9	7.8
2560	768	4,749	4.0	8.3
2560	512	6,706	4.2	9.1
2560	320	9,706	4.6	11.4
2560	128	17,500	5.7	16.4
2560	64	24,050	8.3	23

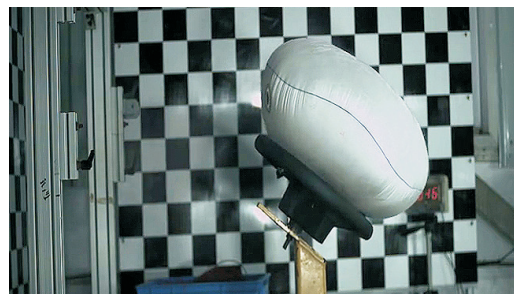
There is no speed increase if you reduce the sensor width. There is only a speed increase if you reduce image height. Example. 1280 x 1024 will have the same frame speed as 2560 x 1024. Record time will increase however with the reduced image size of 1280 x 1024.



SAMPLE APPLICATIONS



Aerospace



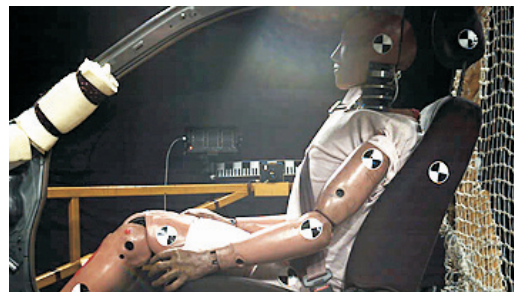
Automotive



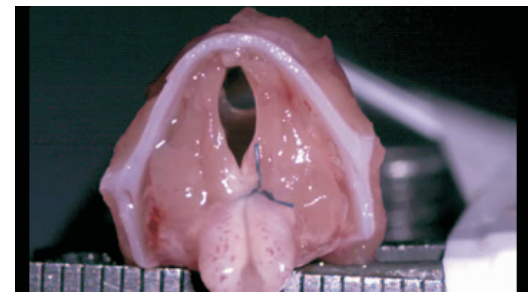
Drop Test



Aerospace



Automotive Testing



Biology Study



**The Most Productive High Speed Camera In It's Class
2560 x 1920 at 2000fps**



MS130K-HD model shown with 64GB camera body and on-camera monitor.

Mega Speed high speed cameras continue to offer the world's high speed imaging customers with some of the most productive high speed camera designs available. A camera design providing the customer with the very best features and prices available.

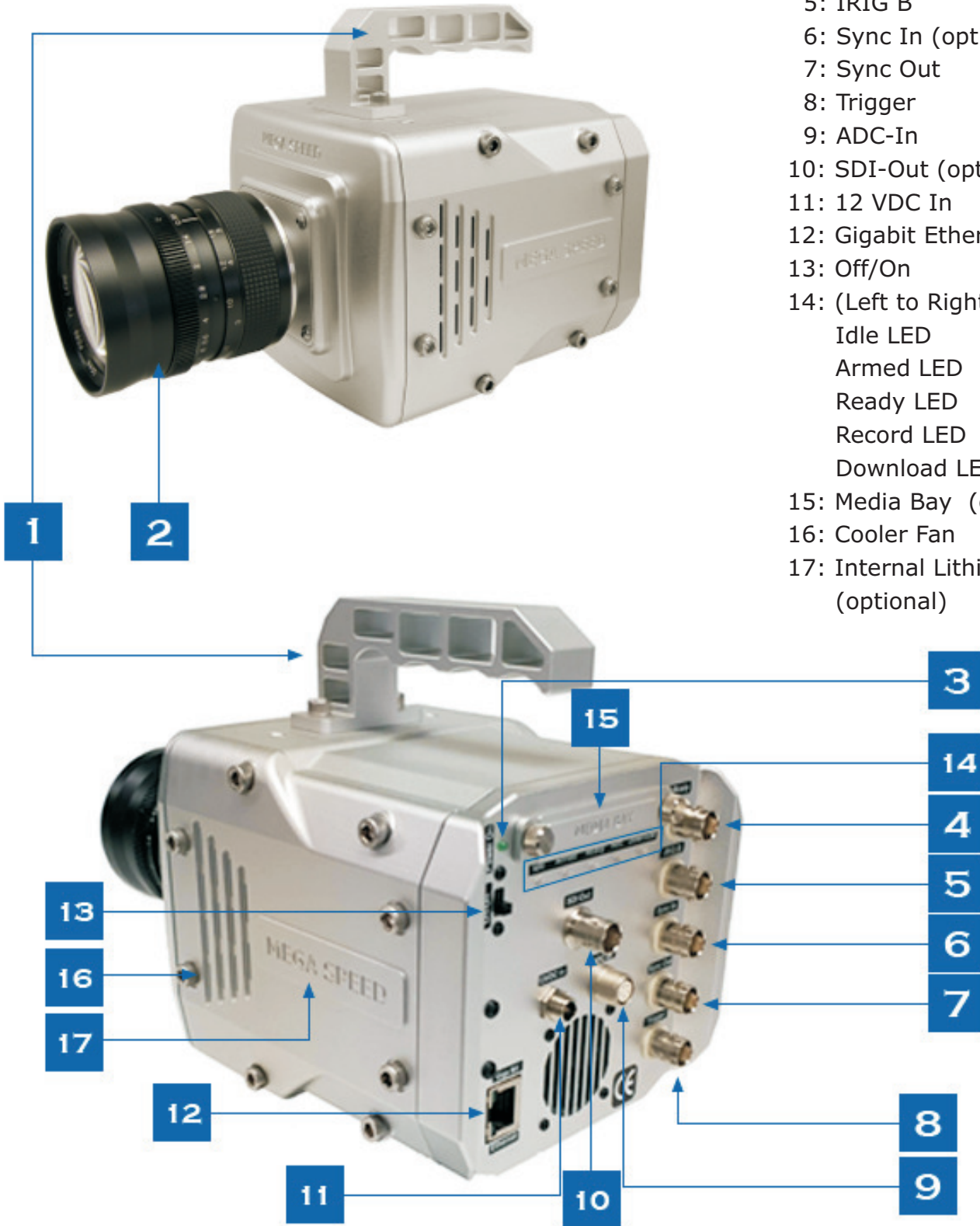
Mega Speed cameras are suitable for a wide range of applications. These high-speed cameras are suitable on the test range, in the R&D test lab or for use in that critical application where a dependable camera is needed to capture that all important test video. Optional automatic high speed file back-up to it's on-board removable solid state drive. Permanently saving the recent test video.

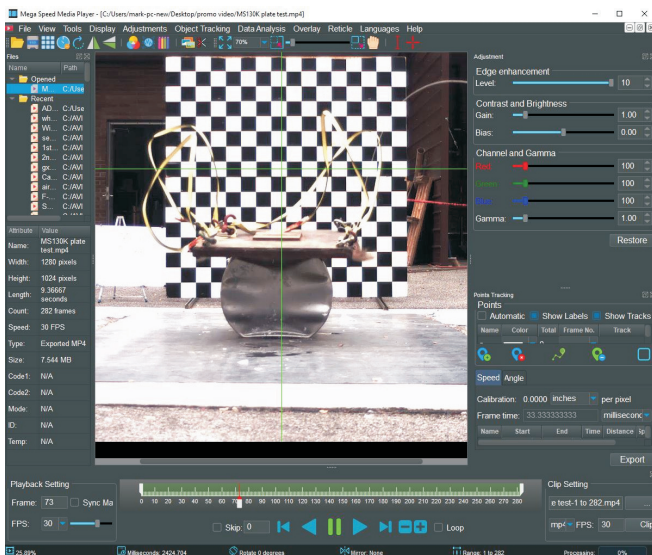
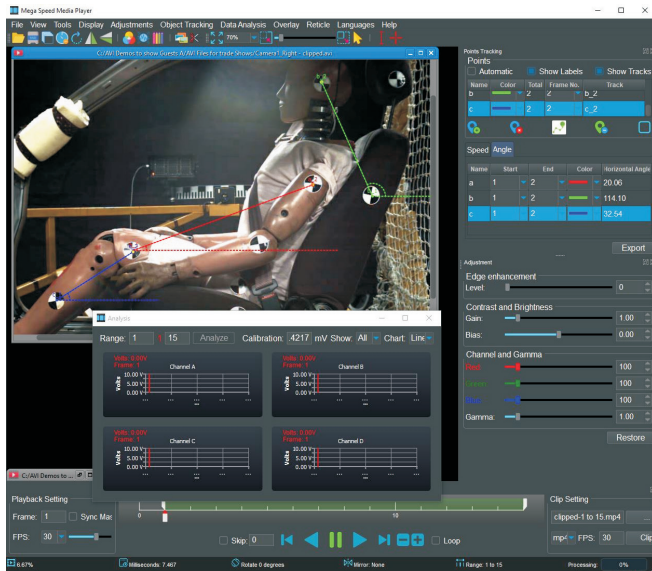
Mega Speed high speed cameras have several optional features such as high write speed removable solid state drives which are accessible through the camera's rear media bay. The removable drives offer data security as well as easy drive removal when replacements are required.

Standard onboard multi channel data acquisition module is ready to synchronize test data with your high speed image data offering a clear understanding and interpretation of the test video.

Contact us today to arrange a demonstration of our outstanding high speed camera models.

- 1: Handle
- 2: Standard "C" Mount
- 3: Power On LED
- 4: Ready Out
- 5: IRIG B
- 6: Sync In (optional)
- 7: Sync Out
- 8: Trigger
- 9: ADC-In
- 10: SDI-Out (optional)
- 11: 12 VDC In
- 12: Gigabit Ethernet
- 13: Off/On
- 14: (Left to Right)
Idle LED
Armed LED
Ready LED
Record LED
Download LED
- 15: Media Bay (optional)
- 16: Cooler Fan
- 17: Internal Lithium Batteries (optional)





Making Sense Of Your High Speed Image Data. The Included Mega Speed Media Player!

New Tools To Measure, Synchronize, Batch Process, Clip And Compress. The Fastest Video Analysing Work-Flow Available. Helping You Make Sense Of All Your High Speed Image Data. Free with every Mega Speed Camera.

MEGA SPEED MS130K-HD SPECIFICATIONS

Sensor Specifications And Exposure Control	<ul style="list-style-type: none"> ▪ CMOS 4/3 image sensor. Available in either monochrome or color versions ▪ 2560 x 2176 pixels maximum resolution ▪ 2560 x 64 pixels minimum resolution ▪ 2005 fps maximum speed at 2560 x 1920 pixels ▪ 3300 fps maximum speed at 2560 x 1125 resolution or better ▪ Other Image size are software adjustable in user defined segments ▪ Software adjustable global shutter down to 1 μs ▪ Automatic electronic exposure control or manual exposure control ▪ Spectral response is 400nm to 1000nm peaking at 550nm ▪ Pixel full well capacity is 30.0ke- ▪ Pixel noise is 3.8 e- ▪ Dynamic range is 67.9 dB
Trigger Options	<ul style="list-style-type: none"> ▪ 3.3 VDC to 24 VDC via BNC trigger jack ▪ Dry contact trigger control (push button pickle switch is included) ▪ Software controlled manual trigger ▪ Multiple start/stop trigger mode with auto stop when camera memory is full ▪ Pre/post trigger mode with full scale pre and post segment adjustment ▪ Segmented trigger ▪ Single sequence trigger mode ▪ Snap shot trigger mode
Time Source And Synchronization	<ul style="list-style-type: none"> ▪ By internal PC clock ▪ By external IRG time clock to camera IRIG BNC - user supplied time clock ▪ Sync in to BNC connector from external clock source or master camera ▪ Sync out from BNC connector from pass through sync source or frame time ▪ Sync in to BNC connector from external IRIG source - user supplied ▪ 10 ns accurate time propagation delay ▪ 3.3 VDC ready out signal when camera is in armed status via ready BNC and LED
Camera Inputs	<ul style="list-style-type: none"> ▪ IRIG BNC connector ▪ Sync in BNC connector ▪ Trigger in BNC connector ▪ DC power supply jack ▪ 1 Gigabit 45 jack for Gigabit camera control. Optional 5GB or 10GB Ethernet.
Camera Outputs	<ul style="list-style-type: none"> ▪ Ready out BNC connector ▪ Sync out BNC connector ▪ Armed status LED ▪ Ready status LED ▪ Recording status LED ▪ Power on status LED
Video Output	<ul style="list-style-type: none"> ▪ Live stream to PC via Gigabit connection
Camera Input Protection	<ul style="list-style-type: none"> ▪ Reverse input voltage protection ▪ ESD circuitry protection ▪ EMI shielding ▪ Camera temperature watch dog ▪ Camera voltage level indicator
Memory	<ul style="list-style-type: none"> ▪ 16GB, 32GB or 64GB internal SD RAM recording buffer
Camera Firmware	<ul style="list-style-type: none"> ▪ Remote on-site firmware upgrade for camera firmware feature
Record Times	<ul style="list-style-type: none"> ▪ 6.6 seconds at maximum image size and maximum frame rate
PC Software Control	<ul style="list-style-type: none"> ▪ Mega Speed Camera Control ▪ Windows 10 or 11 ▪ Software control for all camera functions (frame rate, exposure time, image size etc)

MEGA SPEED MS130K-HD SPECIFICATIONS

	<ul style="list-style-type: none"> ▪ Record to internal SDRAM ▪ Download frame rate control ▪ Auto-download and re-arm for next trigger event ▪ Frame time, event and settings stamping on screen overlay images ▪ Trigger glitch detection to remove false triggers
Video Editing Software	<ul style="list-style-type: none"> ▪ Mega Speed Media Player ▪ Video playback and review ▪ Video file clipping and merging ▪ Vertical and horizontal cross hair reticules ▪ MP4 video compression engine to compress edited files and for file sharing ▪ Gamma, white balance ▪ Image rotation ▪ Image export to JPEG, BMP, TIFF, DNG, AVI, MP4, MSV ▪ Compatible with other vendors software ▪ Video playback time base adjustment tool ▪ Object tracking, velocity and distance measurement ▪ Multi channel data analysis tools synchronized to video file ▪ Image overlay grid
PC Requirements	<ul style="list-style-type: none"> ▪ Modern day PC running Windows 10 or 11 ▪ 1000GB minimum hard drive ▪ 16 GB PC RAM ▪ 1 GB Ethernet chip-set or 10Gig NIC if camera has 5GB or 10GB NIC ▪ 1 RJ 45 connection for GB connection to camera ▪ 17" 1920 x 1080 monitor resolution minimum. 2560 x 1400 preferred
Lens Mount	<ul style="list-style-type: none"> ▪ C mount compatible with C to Nikon F adapter with manual f-stop for Nikon, Pentax and Canon lenses.
Camera Size	<ul style="list-style-type: none"> ▪ 4.5" x 4.9" x 7.35"
Camera Weight	<ul style="list-style-type: none"> ▪ 4lbs without lens
Camera Body / Structure	<ul style="list-style-type: none"> ▪ Machined aluminum frame anodized hard coat natural finish for low solar load. ▪ Compact efficient modern design ▪ Vented ribs ▪ Heat sink and air cooled ▪ Convenient quick attach BNC and multi-pin rear connections ▪ Full function camera status LED indicators
Camera Mounts	<ul style="list-style-type: none"> ▪ 5 -bottom 1/4 x 20 tpi, threaded, 4 top 1/4 x 20 tpi all threaded 0.250 down
Camera Power Requirements	<ul style="list-style-type: none"> ▪ 12 VDC 35 watts
Temperature / Shock Operating Rating	<ul style="list-style-type: none"> ▪ -30°C - to +40°C. 20G, 10ms, random sine wave ▪ -40°C - to +60°C. storage
Included In The Box	<ul style="list-style-type: none"> ▪ Camera ▪ Mega Speed 50mm set up lens ▪ Camera tripod mount ▪ 5 BNC 2 meter patch cables and tees ▪ Dry contact trigger pickle switch ▪ 15' CAT 6 Ethernet cable ▪ Camera brick power supply and country specific cord end ▪ Camera Control software ▪ Mega Media Player software ▪ Sensor cleaning swab ▪ Custom Mega Speed brand soft camera bag ▪ Installation USB stick with install software and owner's manual
Available As An Option	<ul style="list-style-type: none"> ▪ Laser cut foam lined hard protective storage case ▪ 3.3 VDC Mega Speed trigger box

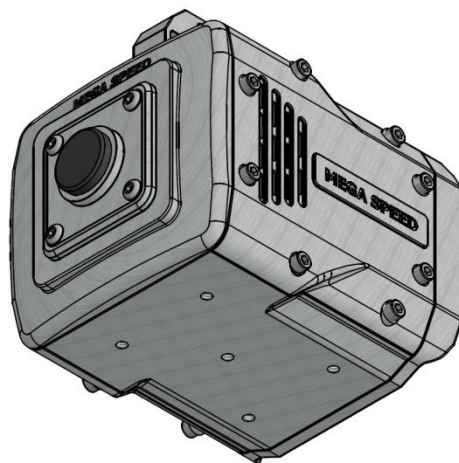
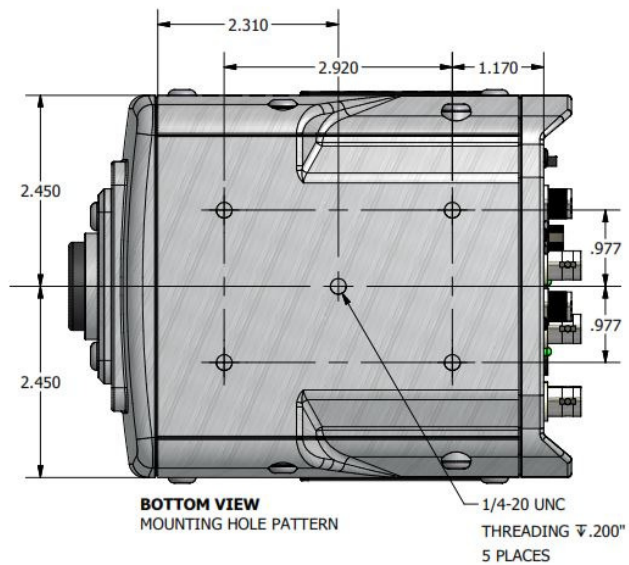
MEGA SPEED MS130K-HD SPECIFICATIONS

	<ul style="list-style-type: none">▪ 3.3VDC to 48 VDC extended trigger input range▪ 10M Dry contact trigger switch▪ NBASE 2.5, 5GB or 10GB Ethernet connection▪ Multi channel data acquisition connector for 0 to 10 VDC levels▪ Internal battery and charge status LED▪ 1920 x 1080 SDI broadcast video at 60 fps▪ 64 GB SDRAM camera memory▪ 256 GB, 512 GB or 1TB internal SSD▪ 10 VDC to 36 VDC▪ Internal battery▪ Solid state drive size (240 GB, 512GB or 1TB. Supply constraints possible)▪ C to F mount for Nikon, Canon, Pentax with focus control for Canon only.▪ 1920 x 1080 SDI broadcast video standard at 60 fps▪ 10VDC to 36 VDC input supply voltage▪ ADC patch cable for multi channel data acquisition▪ Lenses with various focal lengths▪ Tri-pod▪ LED work lights▪ Hi G-Force cables and connectors
	Specifications and option availability subject to change without notice. Confirm with your sales representative before placing an order

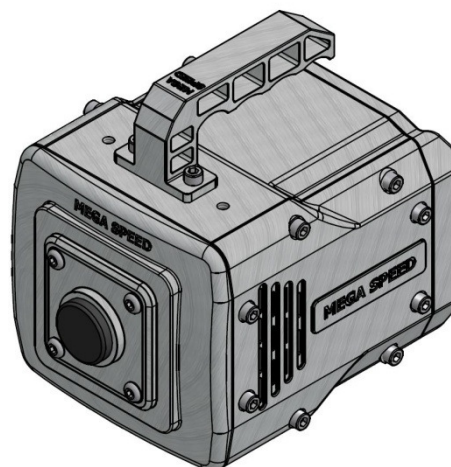
Notes: Available options may have extended lead times depending on certain option combinations

MEGA SPEED MS130K-HD SPECIFICATIONS

Mechanical Dimensions



ISOMETRIC BOTTOM RIGHT



ISOMETRIC TOP RIGHT