



CrashCamMini™

The CrashCam mini is a rugged, high-G and vibration-rated camera designed to withstand harsh, space-limited testing environments. With its ultra-compact design, this camera has become the industry-standard for on-board vehicular testing and instrumentation of test dummies, but its versatility can be leveraged in any industry. Six CrashCam mini series models deliver resolutions up to a maximum of 5120x2880 with frame rates up to a maximum of 5,850 fps, and optimize live image monitoring via HD SDI output. All models come standard with 8GB DDR, USB-C interface, backup capability via removable MicroSDs (SanDisk recommended and sold separately), C-mount lens, and PTP synchronization support. The optional airborne feature offers support for GiGE Vision and Chapter 10 IRIG standards and includes hydrophobic coating. Flexible connectivity options offer easy, out-of-box implementation for single or multi-camera installations in USB-C, 16-pin, 18-pin and 19-pin camera environments.

- Ultra-compact form factor
- HDSDI output
- MicroSD compatible

APPLICATIONS

Automotive, Research

KEY FEATURES

Maximum Resolution	1920 x 1080
Maximum FPS @ Maximum Res	5,850 fps
Operating Temperature	-40+50°C / -40+122°F

FRAME PROPERTIES

Sensor Type	CMOS - Proprietary
Sensor Size	17.5 x 9.9 mm
Sensor Format	1.3 inch
Pixel Size (micron)	9.13 x 9.13 µm
Pixel Depth	12 bit mono 36 bit color
Sensitivity	30,000 ISO Mono, 10,000 ISO Color
Min. Exposure Time	1µs (*Shorter Integration optional)
Array	2.0 megapixel
Quantum Efficiency	50%

MECHANICAL

Weight	0.27 kg or 0.59 lbs
Dimensions	44 x 44 x 70 mm (W x H x L)
Shock & Vibration	Shock: 200G / Vibration: 40G - All axes
Mount	C-Mount (Standard), Motorized MFT

TRIGGERING AND SYNCHRONIZATION

Sync In	Phase-lock TTL, IEEE1588, 1PPS
Sync Out	Frame sync / Strobe
Trigger	TTL & Switch/Circular buffer with on-camera or software trigger
HDSDI	Standard

Model CCM-HD



POWER

Input Voltage	7.5-14VDC
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COMMUNICATION INTERFACE

Ethernet	2.5 Gbps
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EMBEDDED LOGIC

Debayering	Color Cameras Only
Temporal Noise Reduction	Standard
Dynamic Noise Reduction	Standard
User defined ROI's and LUT's	Standard
Frame to frame Auto-Exposure and Motion Trigger	Standard

IMAGE CAPACITY

DDR	8GB
MicroSD	Up to 400GB (Tested)

SOFTWARE

Motion Studio	Windows 32/64
Motion Inspector	Windows 32/64 - MAC OS X - Apple iOS
Plug-ins/SDK	SDK, LabVIEW™ or MatLab®
File Formats	Proprietary RAW
On-the-fly Conversion	TIF, BMP, JPG, PNG, AVI, MPG, TP2, MOV, MRF, MCF