SPECIFICATION SHEET

CrashCamMini™

Model 1540

The CrashCam mini 1540 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. CrashCam mini cameras offer live video streams via HDSDI output, backups through removable MicroSDs and support PTP synchronization. The Model 1540 supports 1440×1024 resolution with up to 4,000 fps and comes standard with 8GB DDR RAM, USB-C interface and C-mount lens mount. Additional configuration options include manual or motorized Micro Four Thirds lens mount and an airborne feature that includes hydrophobic coating as well as support for GiGE Vision and Chapter 10 IRIG standards. Flexible connectivity options offer easy, out-of-box implementation for single or multi-camera USB-C installations, as well as compatibility with 16-pin, 18-pin and 19-pin camera environments.

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

APPLICATIONS

Automotive, Research

KEY FEATURES

Maximum Resolution	1440 x 1024
Maximum FPS @ Maximum Res	4,000 fps
Maximum FPS	124,000 @ 1440 x 16
Operating Temperature	-40+50°C / -40+122°F

FRAME PROPERTIES

Sensor Type	CMOS – Proprietary
Sensor Size	16.7 x 11.9 mm
Sensor Format	1.3 inch
Pixel Size (micron)	11.60 x 11.60 um
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	1.5 megapixel
Quantum Efficiency	1

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)

IMAGE CAPACITY

DDR	8GB
MicroSD	Up to 400GB (Tested)

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

POWER

Input Voltage	7.5-14VDC

COMMUNICATION INTERFACE

Ethernet	1000BaseT

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
Mission Mode for Remote/Autonomous Operation	Standard

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