



CrashCamMini™ LEMO Series

Model 1970

The CrashCam™ mini LEMO series 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 it's versatility can be leveraged in any industry. The Model 1970 comes standard with 8GB DDR, supports 1600 x 1200 resolution at 6,500 fps and includes a 16-pin LEMO interface, backup capability via removable MicroSDs, C-mount (or optionally priced Motorized MFT lens mount for non-high-G applications), and PTP synchronization support. IDT's optional airborne feature includes special hydrophobic coating to protect against condensation due to rapid changes in ambient conditions, and supports GiGE Vision and Chapter 10 IRIG standards. Connectivity options offer easy, out-of-the-box implementation for single or multi-camera installations with connectivity for 18-pin camera environments as a special order.

- Ultra-compact form factor
- MicroSD compatible
- Optional airborne feature

APPLICATIONS

Media/Broadcast, Automotive, Research, Aerospace



Shown with Motorized MFT Mount

KEY FEATURES

Maximum Resolution	1600 x 1200
Maximum FPS @ Maximum Res	6,500 fps
Operating Temperature	-40+50°C / -40+122°F

FRAME PROPERTIES

Sensor Type	CMOS – Proprietary
Sensor Size	13.9 x 10.4 mm
Sensor Format	1.3 inch
Pixel Size (micron)	8.68 x 8.68 μm
Pixel Depth	36 bit color
Sensitivity	2,000 ISO Color
Min. Exposure Time	1μs (*Shorter Integration optional)
Array	1.9 megapixel
Quantum Efficiency	60%

MECHANICAL

Weight (C-Mount / MMFT Mount)	0.3 kg or 0.66 lbs / 0.34 kg or 0.75 lbs
Dimensions (C-Mount / MMFT Mount)	70 x 44 x 76 mm / 78 x 44 x 73 mm (W x H x L)
Shock & Vibration	Shock: 200G / Vibration: 40G – All axes
Mount	C-Mount (Standard), Motorized MFT

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

POWER

Input Voltage	7.5-14VDC
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COMMUNICATION INTERFACE

Ethernet	2.5 Gbps
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EMBEDDED LOGIC

Debayering	Standard
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

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