

CrashCam™

Model 2020

IDT's CrashCam™ is a rugged, sealed, high G and vibration rated camera product designed for use (not exclusively) in harsh, Automotive testing environments. Latest CMOS sensor technology produces extremely low-noise images with up to 12-bit mono or 36-bit color. Support for several sensor platforms to deliver various resolutions and frame rates. Power supply and break-out cable for easy out-of-the-box operation are included.

- Solid-state, non-volatile memory
- High dynamic range, low noise
- For use in extreme environmental conditions
- Optional battery backup

APPLICATIONS

Automotive Testing



KEY FEATURES

Maximum Resolution	1920 x 1080
Maximum FPS @ Maximum Res	2,000 fps
Maximum FPS	110,000 @ 1920 x 8
Streaming Frame Rate	135 fps
Operating Temperature	-40+50 °C / -40+104 °F

FRAME PROPERTIES

Sensor Type	CMOS - Proprietary
Sensor Size	19.2 x 10.8 mm
Sensor Format	1.3 inch
Pixel Size (micron)	10 x 10 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	2.0 megapixel
Quantum Efficiency	60%

MECHANICAL

Weight	0.69 kg or 1.52 lbs
Dimensions	86 x 63 x 88 mm (W x H x L)
Shock & Vibration	Shock: 200G / Vibration: 40G - All axes
Mount	C-Mount (Standard), Manual MFT, F & PL Adapter (Optional)

IMAGE CAPACITY

DDR	16GB (Standard) - 32GB (Optional)
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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
GPS Time Code	Optional
HDSDI	Standard

POWER

Input Voltage	24 VDC
Battery	Optional

COMMUNICATION INTERFACE

Ethernet	1000BaseT
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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
Mission Mode for Remote/Autonomous Operation	Standard

SOFTWARE

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