



## CrashCamMini™

The CrashCam™ mini 1520 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. The Model 1550 supports 1440 x 1024 resolution with up to 2,000 fps and comes standard with 8GB DDR RAM, USB-C interface and C-mount lens mount. Additional configuration options include an alternative LEMO interface, replacing the USB-C and HSDSI interface with a 16-pin LEMO connector and a motorized Micro Four Thirds lens mount for non-high-G applications. IDT's optional airborne feature includes special nano coating to protect against condensation due to rapid changes in ambient conditions, and supports GiGE Vision and Chapter 10 IRIG standards. Short Integration is offered as an additional optional feature.

- Ultra-compact form factor
- HSDSI 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         | 19.2 x 10.8 mm                      |
| Sensor Format       | 1.3 inch                            |
| Pixel Size (micron) | 7.5 x 7.5 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               | 3.7 megapixel                       |
| Quantum Efficiency  | 60%                                 |

### 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 |
| HSDSI    | Standard  |

## Model CCM-HD



### POWER

|               |           |
|---------------|-----------|
| Input Voltage | 7.5-14VDC |
|---------------|-----------|

### COMMUNICATION INTERFACE

|          |          |
|----------|----------|
| Ethernet | 2.5 Gbps |
|----------|----------|

### 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 |