CrashCamMini™

Model 1520

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. CrashCam mini cameras offer live video streams via HDSDI output, backups through removable MicroSDs and support PTP synchronization. The Model 1520 supports 1440×1024 resolution up to 2,000 fps and comes standard with 8GB DDR RAM, USB-C interface and C-mount lens mount. Additional configuration options include a motorized Micro Four Thirds lens mount and an airborne feature with hydrophobic coating as well as support for GiGE Vision and Chapter 10 IRIG standards.

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

APPLICATIONS

Automotive, Research

KEY FEATURES

Maximum Resolution	1440 x 1024
Maximum FPS @ Maximum Res	2,000 fps
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	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)

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	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
Mission Mode for Remote/Autonomous Operation	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

CrashCamMini™

Model CCM-1550

The CrashCam™ mini 1550 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 4,850 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 HDSDI 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
- HDSDI output
- MicroSD compatible

APPLICATIONS

Automotive, Research

KEY FEATURES

Maximum Resolution	1440 x 1024
Maximum FPS @ Maximum Res	4,850 fps
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	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)

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	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
Mission Mode for Remote/Autonomous Operation	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
MotionPad	Windows 32/64
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

CrashCamMini™

Model CCM-3510

The CrashCam™ mini 3510 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 2560 x 1440 resolution with up to 1,000 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 HDSDI 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
- HDSDI output
- MicroSD compatible

APPLICATIONS

Automotive, Research

KEY FEATURES

Maximum Resolution	2560 x 1440
Maximum FPS @ Maximum Res	1,000 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)	7.50 x 7.50 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
HDSDI	Standard

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

CrashCamMini™

Model CCM-3530

The CrashCam mini™ 3530 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 3530 supports 2560 x 1400 resolution with up to 3,000 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 HDSDI 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
- HDSDI output
- MicroSD compatible

APPLICATIONS

Automotive, Research

KEY FEATURES

Maximum Resolution	2560 x 1440
Maximum FPS @ Maximum Res	3,000 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)	7.50 x 7.50 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	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)

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	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
Mission Mode for Remote/Autonomous Operation	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

CrashCam Mini

Model CCM 4K Veloce

The CrashCam mini 4K Veloce 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 4K Veloce supports 3840×2160 resolution up to 1,000 fps and comes standard with 8GB DDR RAM, USB-C interface and C-mount lens mount. Additional configuration options include a motorized Micro Four Thirds lens mount and an airborne feature with hydrophobic coating as well as support for GiGE Vision and Chapter 10 IRIG standards.

- Ultra-compact form factor
- User-Friendly Operation
- Optional Remote Control

APPLICATIONS

Integrative Biology, Range Tracking, Sports Biomechanics, R&D

KEY FEATURES

Maximum Resolution	3840 x 2160
Maximum FPS @ Maximum Res	1,000 fps
Operating Temperature	-40+50°C / -40+122°F

FRAME PROPERTIES

Sensor Type	CMOS – Proprietary
Sensor Size	16 x 8.4 mm (Active)
Sensor Format	1.3 inch
Pixel Size (micron)	3.90 x 3.90 um
Pixel Depth	10 bit mono 30 bit color
Sensitivity	6000 ISO Mono 2000 ISO Color
Min. Exposure Time	1µs (*Shorter Integration optional)
Array	8.8 megapixel
Quantum Efficiency	60%

MECHANICAL

Weight	0.20 kg or 0.45 lbs
Dimensions	58 x 47 x 44 mm (W x H x L)
Shock & Vibration	Shock: 200G / Vibration: 40G – All axes
Mount	C-Mount (Standard), Motorized MFT (Optional)

COMMUNICATION INTERFACE

Ethernet	2.5 Gbps

SOFTWARE

Motion Studio	Windows 64
Motion Inspector	Windows 64
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