CrashCamMini™

Model CCM-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. 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 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	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 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	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), 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-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 4,650 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	4,650 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

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™ 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 hydrophic 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

Shown with Motorized MFT Mount

APPLICATIONS

Media/Broadcast, Automotive, Research, Aerospace

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

COMMUNICATION INTERFACE

Ethernet	2.5 Gbps

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

CrashCamMini™

Model CCM-HD

The CrashCam™ mini HD 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 HD supports 1920 x 1280 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	1920 x 1280
Maximum FPS @ Maximum Res	4,850 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
HDSDI	Standard (USB-C Interface Only)

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-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

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-4K Veloce

The CrashCam mini™ 4K Veloce is a rugged, high-G & 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 4K Veloce supports 3840 x 2160 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	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
Sensor Format	1.3 inch
Pixel Size (micron)	3.90 x 3.90 µm
Pixel Depth	10 bit mono 30 bit color
Sensitivity	6,000 ISO Mono 2,000 ISO Color
Min. Exposure Time	1µs (*Shorter Integration optional)
Array	8.8 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

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