M-VIT Platinum High-speed camera

A camera with all features!
An unbeatable price

Imaging for smart decisions...

Speedy image quality

1280 x 800 pixel
at up to 4000 fps
M-VIT Platinum delivers
crisp clear images with
speed.

**Non volatile
16GB flash memory**

Imminent backup of
recording data to flash
memory.
Never lose image data.

Built-in g-shock sensor

Built in g-sensor for
direct in camera triggering.
Levels adjustable
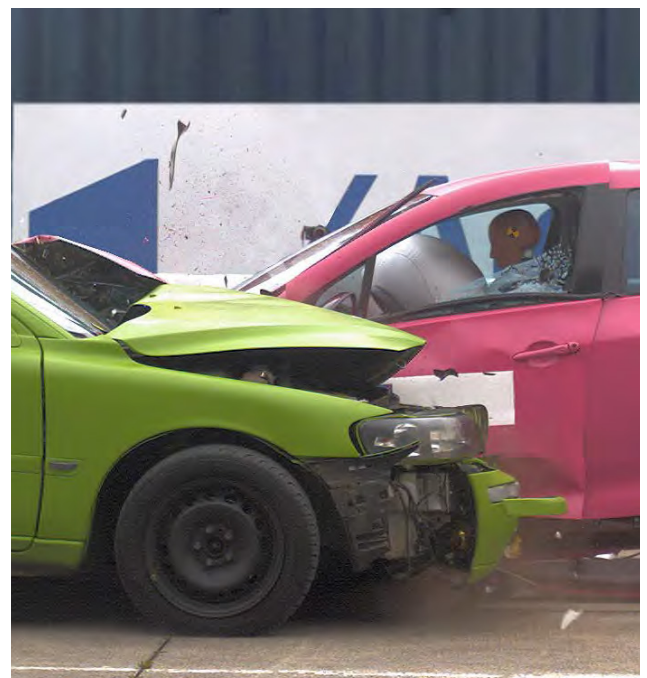by software.

Includes extensions

CFast Flash Disk and
HDMI or HD-SDI output
on camera. IRIG-B
synchronization

M-VIT Platinum – ultimate power packed in a high-speed camera

- **High-G-rated for up to 150g and taking 4000 fps, ready to be used in the most severe environments.**

- **A robust high resolution camera for demanding applications in research and development.**

M-VIT Platinum is particularly suited for all applications where a compact, portable, high resolution yet robust camera is essential. The highly light-sensitive sensor covers the most ambitious application. Packed with lots of features the M-VIT Platinum leaves no whish open in regards of versatility and use.

Built-in non volatile flash memory automatically saves a copy of each live recording for data redundancy, this is crucial for critical tests that cannot be repeated. The camera comes with HDMI or alternatively HD-SDI video output, a CFast card interface for memory extension and a powerful software suite including an automatic motion analysis package. The camera is IEEE 1588 PTP protocol ready.

Typical frame rates vs resolution

1280	864	3716 fps
1280	800	4010 fps
1280	720	4451 fps
1280	512	6222 fps
1280	256	12'207 fps

Maximum speed 220'000 fps, within limitations of sensor

Recording time

Memory Size	8 GB	16 GB
1280 x800 @ 1000 fps	6 sec	12 sec

Optical/Sensor specifications

Image Sensor	CMOS sensor
Pixel Size	14 microns
Sensor Format	4/3" 17.92 x 12.09 mm
Light Sensitivity	ISO 10'000 (monochrome), ISO 6000 (color) without gain
Gain	3 gain settings available, adjustable by software
Dynamic Range	Mono 10 Bit / Color 30 Bit
Shutter Type	Global, independent of frame rate
Exposure Time	Free adjustable from 1 µsec to 1 / framing rate by software
Lens Mount	C-Mount or optional EF/ F-Mount

Software and camera operation

Live Video	Live video out via Ethernet, HDMI or HD-SDI
Buffer Type	Circular buffer, parametrized by software
Number of Buffers	Up to 100 buffers, individually configurable by software
Trigger Modes	Pre-post recording, adjustable in steps of 1 frame, rising falling edge, delayed trigger, trigger debouncing Shock trigger (high g trigger)
Auto Exposure	Auto exposure for automatic brightness control
Auto Download	Auto download to PC or CFast card (CFast card optional)
Flash Backup	Automatic store of video data after trigger to flash memory.
Export Formats	Export in all popular movie and single image formats supported
Control SW	AOS Imaging Studio v4 for parametrization, recording, editing and exporting/converting of recordings included

Data interface

Data	Gigabit Ethernet RJ45 lockable
I/O	Solid 14 pin LEMO connector, compatible with all AOS camera series
Trigger In	Input for start stop recording, falling edge, switch closure
Armed Out	Armed out to indicate camera status ready for recording
Triggered Out	Indicates that trigger is received and camera finishes recording
Remote On	For remote switch on of camera
Sync In/Out	Sync in/out on camera
Strobe	Strobe out for synchronization of LED illumination
IRIG-B	IRIG-B 122 input for frame synchronization and time stamping
Power Requirements	10…36 V /40 Watts
Analog inputs	Two analog inputs for recording external signals synchronized to recording
IEE1588	PTP protocol ready, inquire for accessories

Options and add-on

Camera Memory	8 GB or 16 GB
Battery	Rechargeable battery for up to 12 mins operation lasting long enough to dump 16GB data to flash memory when power is not available
Video Out	HDMI or HD-SDI video out on camera, select with order
Non-volatile Memory	Removable CFast card interface with auto download functionality
Cooling	Fan unit mounted on camera, automatically controlled by camera, replaceable by user. Fan stop function via software.
C-F-Mount Adapter	For F-Mount lenses, with dial for F-stop
C-EF-Mount Adapter	For EF-Mount lenses, remote control of Focus and aperture
Single Connector Interface	Single push-pull interface according German «Arbeitskreis»

Physical specifications

Size & Weight	width: 75 mm / height: 75 mm / length: 130 mm / 1.57 kg width: 2.95" / height: 2.95" / length: 5.12" / 3.46 lb
Operating Temperature	-10 … + 45 °C / +14 … +113 °F
Storage Temperature	-40 … +70 °C / -40 … +158 °F
Shock Resistance	150g / 11msec all axis, spikes up to 200g according EN60068-2-27:2009
I/O Connector	LEMO type ref. FGG.2B.314.CLAD72Z (cable type)
CE	In compliance with relevant standards
Mounting	¼" UNC thread, bottom / M6 mounting threads on 4 sides

Ordering information

Model	M-VIT Platinum 8GB	M-VIT Platinum 16GB
Color HDMI	472021-22-2102	472021-23-2102
Mono HDMI	472025-22-2102	472025-23-2102
Color HD-SDI	472021-22-2302	472021-23-2302
Mono HD-SDI	472025-22-2302	472025-23-2302

All cameras come in foam cut hard shell case with room for user accessory with cabling, power supply and software

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