FO4305OZ02

L-VIT 2500 – the rugged, ultra-compact high speed camera

Hi-G-rated for 150+ G, Full HD @ 2500 fps, ready to be used in the most severe environments. A robust high resolution camera for demanding applications in research and development.

The L-VIT is particularly suited for all applications where a compact, portable, high resolution and robust camera is essential. The highly light-sensitive sensor covers the most ambitious application. The L-VIT is designed and certified to withstand G-forces in excess of 150 G /10 msec (all axes) and spikes of up to 200 G. Offering a wide range of signals for external control or feedback on camera status during tests, the L-VIT is a genuine all-in-one camera. To round it all up, the comprehensive Imaging Studio software allows easy piloting from PC, laptop or tablet PC.

Unique features and benefits

- **Superior image quality** – with 1920 x 1080 Full HD resolution at up to 2500 fps L-VIT delivers crisp clear images.

- **Ultra compact and all in one** – L-VIT is an ultra-compact camera ready to shoot in rugged environments.

- **WLAN** – L-VIT is available with WLAN connectivity.

- **Extensions** – Extensions such as CFast Flash Disk or HDMI output on camera are available.

Typical frame rates vs resolution

1920	1080	2500 fps
1920	800	3360 fps
1920	720	3740 fps
1920	536	5000 fps
1920	260	10'100 fps

Recording time

Memory Size	4 GB	8 GB	16 GB
1920 x1080 @ 1000 fps	2 sec	4 sec	8 sec

Optical/Sensor specifications

Image Sensor	CMOS sensor
Pixel Size	10 microns
Sensor Format	4/3" 19.20 x 10.80 mm
Light Sensitivity	ISO 5000 (monochrome), ISO 3600 (colour) without gain
Gain	3 gain settings available, adjustable by software
Dynamic Range	Mono 10 Bit / Colour 30 Bit
Shutter Type	Global, independent of frame rate
Exposure Time	Free adjustable from 2 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 or when installed HDMI, WIFI
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)
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

For more software feature please see AOS Imaging Studio Leaflet

Data interface

Data	Gigabit Ethernet RJ45 lockable
I/O	Solid 14 pin LEMO connector, compatible with all AOS camera series
I/O Tolerance	TTL compatible I/O, up to 24 V tolerant
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 synchronisation and time stamping
Power Requirements	10…36 V /30 Watts

Please check technical camera manual for detailed information

Camera mounted in ChillBox. No additional cabling etc. is required. Simply put camera in ChillBox, connect the power supply via I/O connector and connect Ethernet to camera.

Options and add-on

Camera Memory	4 GB, 8 GB or 16 GB
Battery	Rechargeable battery for up to 20 mins operation and/or memory backup
Video Out	HDMI video out on camera
Non-volatile Memory	Removable CFast interface with auto download functionality
WIFI	Live view and camera set-up via wireless network
ChillBox	For longer offboard use without passive cooling via metal surface use the camera mounted in the ChillBox
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: 75 mm / 910 gr width: 2.95" / height: 2.95" / length: 2.95" / 1.4 lb
Operating Temperature	-10 … + 45 °C / +14 … +113 °F
Storage Temperature	-40 … +70 °C / -40 … +158 °F
Shock Resistance	150 g / 11 msec all axis, spikes up to 200 g according EN 60068-2-27:2009
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

System configuration and optional extensions

Model/Extension	L-VIT 2500	L-VIT 2500 with battery	L-VIT 2500 with CFast/HDMI output
Battery Time	No backup battery	20 min	20 min
Size	75 x 75 x 75 mm	75 x 75 x 107 mm	75 x 75 x 124 mm

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