

Mantis Vision's MVC-F5 Hand-Held Imager Brings 3D Scanning Versatility to a Whole New Dimension



Mantis Vision

Mantis Vision develops and produces 3D imaging tools and content creation software. Its flagship product, the **MVC-F5 hand-held imager** is **revolutionizing the 3D imaging industry**. This is the only imager specifically designed to meet the stringent demands of field operational use.

Customers from defense, law enforcement and forensics agencies; architecture, engineering and construction companies; automobile manufacturers; research and education institutions; oil and gas organizations and 3D service providers, are reaping the benefits of one, small, flexible device for a wide variety of scanning requirements. Small items, car-sized objects and complex scenes are captured effortlessly in seconds and minutes.

Technology

Mantis Vision's proprietary technology enables 3D model capturing of highly dynamic scenes. At the core is a breakthrough single frame coding method for structured light imaging. The MVC-F5 hand-held imager is capable of automatically capturing a dense 3D point cloud model of the environment in each frame. Hundreds more points are decoded while maintaining high accuracy.

Causing a 3D Commotion, the MVC-F5 Hand-Held Imager

- **Speedy** – image capturing in a matter of seconds and minutes ... as opposed to hours and days.
- **Captures motion in motion** – fear no blur. Moving objects captured while the imager itself is on the move.
- **Covert** – using infrared light, invisible to the naked eye means that the MVC-F5 can work in literally any lighting conditions, silently.
- **Easy to use (really)** – a short training session is all it takes for inexperienced professionals to operate the imager.
- **Small and light** – an ideal hand-held device which can be taken and used anywhere.
- **Thrives on challenges** – 3D acquisition even in complex, small, cluttered and hard-to-reach places.
- **Versatile** – the imager is not picky. It is suitable for a wide variety of uses and applications, both close up and far away scans.
- **Rugged** – its shell and internal components are built with demanding outdoor and indoor environments in mind.
- **Scene preparation** – forget about it, none necessary.



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3D that works for you

Technical Specifications

Hardware Specifications	
3D resolution	Up to: 0.5mm
3D point accuracy	Up to: 0.05mm @ 0.5m distance
XY point density	3mm in a single frame @1m Unlimited in stitched mode
3D distance accuracy	Up to: 0.5mm over 100cm
Continuous acquisition time	1 hour
Eye safety	Class 1M Laser (no protection required)
Ambient lighting	From complete darkness to day light. Low sensitivity to environment lighting conditions
Depth of field	0.5 – 4.5m / 1'6" – 14'7"
Linear field of view	HxW 344 x 410mm, closest range
Linear field of view	HxW 3100 x 3630mm, furthest range
Angular field of view	HxW 38 x 44°
Video frame rate	10fps
Exposure time	0.005 - 0.025s
Data acquisition speed	500,000 points/s
Dimensions, HxDxW	160 x 60 x 330mm / 6.3 x 2.4 x 13inches
Weight	1.7kg / 3.7lb
Power consumption	Internal 12V battery operated, 60W
Interface	USB2.0
Calibration	No special equipment required
Environmental vibrations	Unaffected due to dynamic referencing system
Working temperature	-10 to 50°C / 14 to 122°F
Software Specifications	
Multi-core processing	Yes
Output formats	OBJ, PTX, STL, ASCII, PLY
Supported OS	Windows 7 x 64 bit (preferred), Windows 7 x 32 bit, Windows XP x 32 bit
Minimum computer requirements	Intel Core Quad (i5 or i7 recommended), 8GB RAM, NVIDIA GeForce 9000+
Stereo support requirements	NVIDIA Quadro or better

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