



**MANTIS VISION**  
3D that works for you



# F6 SMART

## Outstanding Volumetric Scanner for Field Use

The F6 SMART is the market leader 3D handheld scanner for fast scanning of big objects and large areas from short to far ranges. Based on a patent algorithm of innovative encoding F6 SMART provides superb quality of data making it the ultimate device for scanning complex scenes within seconds.

The F6 SMART is operated by an advanced and easy-to-use integrated software with high-end features such as:

Advanced scanning modes with real time feedback

Powerful 3D data editing tools

Data quality for controlling distances and accuracies

Flexible integration to 3rd party software based on Mantis Vision DLL or SDK

Advanced meshing with full color projection

Matching models from different scans

Multiple interfaces: tablet / laptop / VR

User interface: touch screen / desktop

## SYSTEM BENEFITS:

IR light – enables work in any lighting conditions from complete darkness to day light

Ergonomic rubberized handgrip

No scene preparation – geometry is deciphered by the encoding

2 layer modes of operation: static and dynamic

Accessibility to hidden places

Hot shoe connection for:

- Wireless synchronization of multiple F6 for capturing objects in dynamic motion
- Flash light

User friendly – professionals can operate the system after a short training

Unique design and light weight – suitable for the harsh demands of the outside



F6 SMART on a tripod

## TECHNICAL SPECIFICATIONS

### Hardware specifications

Accuracy	0.2% – 0.1% upon scanning distance
XY point density	5 mrad
Low noise level	less than 0.5 mm @1 meter
Eye safety	Class 1
Ambient lighting	From complete darkness to daylight
Depth of field	4.5 – 0.5 m
Linear field of view	H x W 510 x 670 mm, closest range
Linear field of view	H x W 4585 x 6070 mm, furthest range
Angular field of view	H x W 54° x 68°
RGB camera resolution	1.3 MPix
Video frame rate	8 fps
Exposure time	0.04 – 0.005 s
Data acquisition speed	640,000 points/s
Dimensions, H x D x W	32 x 12 x 4.5 cm
Weight	1 kg
Power consumption	Internal battery
Calibration	No special equipment required
Working temperature	-10° to +50° / 14' to 122°F

### Software specifications

Multi-core processing	Yes
Support OS	Windows 8/10
Output formats	PTS, ASCII, PLY, E57, STL
Interface	USB 2.0

## INDUSTRIES AND APPLICATIONS:

**F6 SMART is suitable for a wide variety of uses and applications in:**

Architecture, Engineering, Construction / Forensics /  
Oil & Gas / Automotive / Education & Research  
/ Aviation / Power Plants / Military /  
VR game designers / Simulations and Training

Mantis Vision is a leading developer of high quality & user-friendly 3D scanning technologies. The company specializes in 3D content creation for a wide range of markets and applications such as: 3D modeling of static objects for professional scanners, 3D engines for OEM partnerships, 3D cameras inside smartphones and tablets for the mobile market, and highly 3D dynamic content creation for VR environment.