

## F6SR

# A superb 3D volumetric handheld scanner for highly detailed scans of minimal size objects

The F6 Short Range (SR) is designed especially for accurate and fast scanning of highly detailed small objects, positioned in close proximity.

Based on a patented algorithm of innovative encoding, F6 SR provides excellent quality of data, making it the ultimate choice for rapid scanning.

The F6 SR is operated by Echo, 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
- Flexible integration to 3rd party software based on Mantis Vision DLL or SDK
- Advanced meshing with full color projection
- Composing registration of models from different scans
- · Multiple interfaces: tablet/laptop/VR
- · User interface: touch screen/ desktop

#### **SYSTEM BENEFITS:**

- Portable & light weight
- · Not limited solely to small objects
- Accurate and fast
- IR light for operation in any lighting conditions
- · No scene preparation necessary
- · Geometry deciphered via encoding
- Accessibility to hard-to-reach places
- · Hot shoe connection for:
  - Wireless synchronization of multiple F6 devices for dynamic motion capture
  - Flash light
- User friendly operable following a brief training

#### **INDUSTRIES AND APPLICATIONS:**

F6 SR is suitable for a wide variety of uses and applications:

- Automotive and marine
- · Architecture, Engineering, Construction
- Forensics
- Education & Research
- Aviation
- Designers
- Art
- VR game designers and special effects

#### **TECHNICAL SPECIFICATIONS**

#### Hardware specifications

Accuracy 90micron @ 250mm
Depth resolution 0.4mm @ 250mm

XY point density 5mrad

noise level less than 0.25mm @ 250mm

Eye safety Class 1

Ambient lighting 0 - 100,000 Lux

Clearance distance 250mm

Depth of field 500mm

Linear field of view HxW 343 x 246mm, closest range HxW 740 x 1030mm, furthest range

Angular field of viewHxW 54° x 68°RGB camera resolution1.3MPixVideo frame rate8fps

Exposure time 0.005 - 0.04s Max points per frame 80,000

Data acquisition speed 640,000 points/s Dimensions, HxDxW 32 x 12 x 4.5 cm

Weight 1kg

Power consumption Internal battery

Calibration No special equipment required

Working temperature  $0^{\circ}$  to  $+50^{\circ}$  / 14' to 122'F

Software specifications

Support OS Windows 7/8/10

Output formats PTS, ASCII, PLY, E57, STL, MP4

Interface USB 2.0

### About Mantis Vision - Capture the World in 3D

Mantis Vision brings high definition 3D content to everyday experiences. We empower consumers, application developers and industry professionals to instantly capture and share high quality 3D content. From 3D cameras on mobile devices to professional handheld 3D scanners and engines for OEMs, our technology easily transforms objects, places and live people into high resolution 3D digital content, in real-time. Using structured light technology that blends digital and physical realities, our vision is to transform the communication medium of tomorrow – where everyone will share 3D selfies, capture 3D volumetric content and document their lives in augmented and virtual reality.

