

Mantis Vision Gives Details on the F6 Handheld 3D Scanner



Mantis Vision has announced a new handheld 3D scanner, the F6. The scanner is unique from previous offerings in that it provides real-time scanning feedback and full colour texturing. It also includes a few unexpected features including the ability to perform dynamic scanning in an array that will make it more versatile.

At about 12 x 5 x 2 inches and only 1.4 kg, the F6 can be held in one hand or mounted on a tripod. It captures 640,000 points per second with very low noise—Mantis Vision says less than 0.5mm at a metre's range and the accuracy is 0.1 to 0.2% of the scanning distance.

Since the device is designed to be used in field applications, it includes an internal battery and is rated for use in ambient lighting “from complete darkness to daylight.” That means it will work either indoors or out.

Mantis Vision's latest offering also includes registration software that offers real-time feedback on a tablet or laptop of your choosing. Connect it to your device using a USB 2.0 interface, and watch as you scan to ensure that you're gathering enough data for your construction field work, forensics capture, or reverse engineering project.

The F6 includes a novel colorization feature that Mantis Vision calls Scan n' Mesh. As you scan, the device captures RGB video at 8 frames per second. Next, the processing software slices the video into jpegs that it stitches over the point cloud. The final product is a detailed, textured, 3D scan.

Perhaps most noteworthy is that you can use the F6 to perform dynamic as well as static scanning, and you can use multiple scanners at once, up to 16 at a time. This means you can use the F6 to capture what amounts to colourized 3D video of a larger scene—perhaps even in a semi-permanent installation.

Lastly, the scanner and its registration software include VR integration. Users can export data easily to the HTC Vive and view their 3D capture in full virtual reality.

Mantis Vision will begin selling the F6 on 31st May 2017 at a price of \$15,000. This cost covers the scanner, registration software, and a hard case.