

DPI-7 Kit

Powered by Phi.3D Software

Handheld 3D Data Capture on a Tablet

DotProduct develops high performance, easy-to-use solutions for capturing 3D data. Our technology is designed for mobile professionals who need high-quality spatial data, instantly. Our Phi.3D software turns an Android tablet into a 3D-capture and -processing solution that delivers results before you leave the worksite.



Phi.3D – 3D Imaging Software for Mobile Professionals

- » Phi.3D captures and registers 3D spatial data using only the processing power of a tablet – no desktop or laptop required!
- » Simplify, augment or even replace laser scanning and photogrammetry based work processes you use today with a DotProduct powered tablet.

Truly Mobile

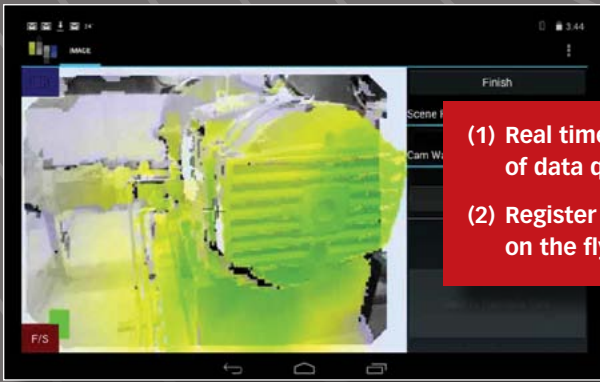
- Forget lugging around a laptop and cumbersome cables
- » Capture and process 3D spatial data directly on the tablet!
 - » Hold the imager in your hand and capture in 3D as you walk through the area of interest.
 - » Get into hard-to-reach, occluded areas, inaccessible with other technologies.



Real Time

- » Leave the jobsite knowing you've collected the right data you need for your project.
- » DotProduct's Phi.3D technology provides users with real-time data quality feedback as the data is being acquired. Even novice users can capture data like seasoned professionals.

New Technology – Familiar and Proven Work Flows



- (1) Real time color coding of data quality.
- (2) Register point clouds on the fly!



Georeference in the Field

- » Phi.3D lets you use traditional survey targets to allow data to be saved in the correct georeferenced transformation.

Append to Scan

- » Use the Append to scan function to add new data to previously captured 3D spatial data. New data can be captured and appended on-the-fly without the need for additional targets or control.
- » Load an existing point cloud*; aim the imager at a view from that scan and Phi.3D will automatically append the new data to the existing scan. (* works with DotProduct data currently, other formats under development)

Export to Industry Formats

- » Use Phi.3D captured data with the desktop point cloud software you work with today. No need to change your current work flow.
- » Export in PTS, PTX or use the DP format for saving to the cloud for efficient storage and rapid wireless data export, or download the data to your secure server via a USB connection. Binary file export to AVEVA LFM and Autodesk ReCap. Other industry formats are under development.

| The DotProduct DPI-7 Handheld 3D Imager Kit contains: | |
|---|--|
| 1 | Android Tablet computer with 16GB of storage (DotProduct reserves the right to provide greater than 16GB depending on availability). |
| 1 | License of DotProduct Phi.3D software which may be downloaded directly to the tablet and licensed to that tablet computer and PrimeSense Carmine 1.08 camera, once the tablet has been activated with Google and registered with DotProduct. One year of support and upgrades is included. |
| 1 | PrimeSense Carmine 1.08 red, green, blue and depth sensor. Performance specifications are available at http://www.dotproduct3d.com/rd1_08_specifications |
| 1 | 7" tablet bracket with handle attachment |
| 3 | USB to micro USB connectors for connecting camera to tablet |
| 1 | Carrying case |
| 1 | Tablet charger |

Test Facility Results

| Range | Typical Accuracy (RMS) | Minimum Accuracy |
|-----------------------|------------------------|------------------|
| < 1 m (3.3 ft) | 0.2% | 0.4% |
| 1 m to 2 m (6.6 ft.) | 0.5% | 0.8% |
| 2 m to 3.3 m (11 ft.) | 0.8% | 1.2% |
| > 3.3 m (11 ft.) | Not specified | Not specified |

DPI-7 Imager Performance

The data quality of the DPI-7 imager depends on range, temperature, ambient lighting conditions, reflectivity of the area of interest, operator skill and other factors. System accuracy is improved by using survey targets. System performance is degraded by long collection times, accumulation of frame-to-frame drift and lack of scene fitness induced by geometry and texture limitations.

The working range of the DPI-7 imager is from 0.6 m to 3.3 m. (2 ft – 11 ft.)

Illustrations, descriptions and technical specifications are not binding and may change.

| DPI-7 Product Specifications - General | |
|--|---|
| Imager type | Compact, near infrared structured light and rgb 3D imaging system |
| User Interface | Android 4.4/Android 4.2 operating system |
| Data Storage | Onboard 16 GB or 32 GB flash drive |
| Data Transfer | USB 2.0/3.0, microUSB connector |

| DPI-7 Product Specifications - Physical | |
|---|---|
| Mass | < 1kg (2.2 lbs.) |
| Dimensions | 20 cm x 24 cm x 6 cm (8 in x 9.5in. x 2.4 in.) |
| Temperature | Tested operating range: 15 °C to 32 °C (60°F to 85°F) |
| Lighting | Not operational in direct sunlight |
| Humidity | Non-condensing |



Please feel free to contact us for more details about our calibration and test procedures.

DotProduct LLC | 10801 Hammerly Blvd. | Suite 128 | Houston, TX 77043 USA | +1 281 758-8301 | www.dotproduct3d.com

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