



# DOT PRODUCT

DPI-10 / DPI-10SR

Handheld 3D Scanning Kits powered by **Dot3D™ Pro** Software



## Tablet-based handheld 3D capture

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. On the DPI-10 and DPI-10SR, our included **Dot3D™ Pro** software enables real-time 3D scanning on Android or Windows.



### NEW with the DPI-10 and DPI-10SR:

- » Multi-sensor compatibility (PrimeSense and RealSense™)
- » Daylight scanning capabilities with Intel® RealSense™
- » Windows OS support (Surface Go or Galaxy Tab S4)
- » Major increase in single scene capture size with 4-8GB RAM
- » Improved HD photo capture functionality on both platforms
- » Semi-automatic registration of multiple DP scans via AprilTags

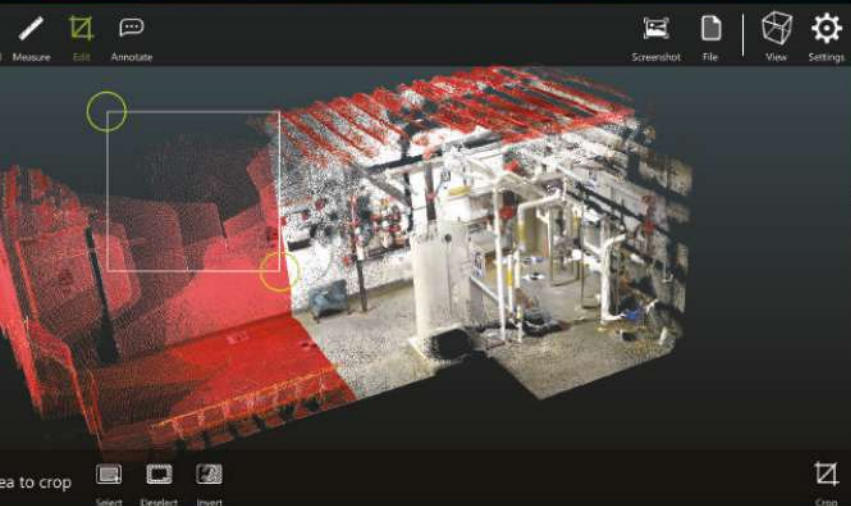
### Truly Mobile, Self-Contained Handheld 3D Scanning

Forget lugging around a laptop and cumbersome cables

- » Capture and process 3D spatial data directly on the tablet!
- » Safely scan difficult areas with one or two hands.
- » Crop, measure, annotate and more in **Dot3D™ Pro**.
- » Compare and register scan data to CAD data on the tablet in the field with **Dot3D™ Pro** 3.1 and up (included).

### Real-Time Results with Dot3D™ Pro on Android & Windows

- » No surprises: leave the jobsite knowing you've collected the right data you need for your project.
- » **Dot3D™ Pro** technology provides users with real-time data quality feedback as the data is being acquired.
- » Instantly review point cloud datasets right on the tablet.



# Completely self-contained, handheld 3D scanning solutions



- (1) HD photo capture while scanning, saved in 3D location
- (2) Instant data review, measurement and more!



## Georeference, Measure, Crop, and Annotate in the Field

- » Set the coordinate system on the tablet in seconds.
- » Measure distances (point-to-point, vertical, horizontal), surface areas, diameters, and more, directly from the data on the job site.
- » Crop, annotate, filter, optimize, implement targets, register, and compare with CAD in the new **Dot3D™ Pro** software on Android.

## Utilize Advanced Workflows to Append and Add Targets

- » Use Append functionality and/or AprilTags targeting to add new data to previously captured 3D data. New data can be captured and appended on-the-fly with or without targets and control.
- » Implement survey targets to reference scale distances and known coordinates. Improve accuracy by using AprilTags for automatic loop closure, scale, or survey targeting.

## Direct Export to Industry Standard Point Cloud Formats

- » Use DPI-10/SR captured data with the desktop 3D software you work with today. No need to change your current workflow.
- » Export in PTS, PTX, PLY, PTG, E57, LAS, LAZ, RCS, POD, or DP for efficient storage and rapid data export. Native DP files integrate directly with Autodesk ReCap, Leica Cyclone, Trimble Realworks, Z+F LaserControl, ClearEdge3D, AVEVA LFM, Bloom Cloud Engine, CloudCompare, InfiPoints, PointCab, Pointfuse, 3D Reconstructor, Rhino, Sequoia, Undet, Visual Statement, WorldViz, and more.

## DPI Test Facility Results\* (measured distance in final post-processed model)

Range	Typical Accuracy	Minimum Accuracy
< 1 m (3.3 ft)	99.8%	99.6%
1 m to 2 m (6.6 ft.)	99.5%	99.2%
2 m to 3.3 m (11 ft.)†	99.0%	98.6%
> 3.3 m ( 11 ft.)*	Not Specified	Not Specified

\*For PrimeSense (not RealSense™) †DPI-10 only. DPI-10SR working range is 0.3-2 m

## DPI-10 / DPI-10SR Compatible Accessories

Intel® RealSense™ D415 Kit, DPI Light Kit, DPI Extension Kit, AccuScale-DP Scale Bar Kit, InfiPoints DP, Pointfuse for DP

## DPI-10/ DPI-10SR Handheld 3D Scanning Kit Performance

The data quality of the DPI-10/SR 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-10 is from 0.6 m to 3.7 m (2 ft – 12 ft). The working range of the DPI-10SR is from 0.3 m to 2 m (1 ft - 6 ft).

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

## DPI-10 / DPI-10SR Product Specifications - General

Imager Type	Compact, near infrared structured light and RGB 3D depth imaging system.
User Interface	Android (S4) or Windows (GO) operating systems.
Data Storage	Onboard storage on chosen tablet. Minimum 64GB.
Data Transfer	USB C 3.0+ transfer cable. USB transfer stick on Windows.
Battery Life	2-3 hours of continuous scanning per tablet.

## DPI-10 Product Specifications - Physical

Mass	1.4 kg (3.1 lbs.) with Surface Go or 1.47 kg (3.25 lbs.) with S4
Dimensions	Windows (GO): 27 cm x 19 cm x 8 cm (10.5 in x 7.25 in x 3.13 in) Android (S4): 30 cm x 18 cm x 8 cm (12 in x 7 in x 3 in)
Temperature	Tested operating range: 15 °C to 32 °C (60 °F to 85 °F)
Lighting	Intel® RealSense™ add-on required for use in sunlight.
Humidity	Non-condensing

## The DotProduct DPI-10 / DPI-10SR Handheld 3D Scanning Kit contains:

- 1 10" Windows/Android tablet computer (also may be purchased separately) DPI-10 models are available for the Surface Go and the Galaxy Tab S4
- 1 License of DotProduct Dot3D™ Pro software, preloaded and licensed to that tablet computer and camera. License is perpetual or subscription
- 1 PrimeSense Carmine 1.082 (1.09 for SR) red, green, blue and depth sensor
- 1 DPI dual-grip housing for compatible tablet and sensor
- 3 USB C to USB C 3.0+ connectors for connecting camera to tablet
- 3 Carrying case
- 1 Tablet charger
- 1 Printed quick start guide and digital user manual

DPI-10 hardware kits are available with your choice of Dot3D™ Pro software. Options include perpetual, triennial, biennial, and annual licenses. Intel® RealSense™ not included by default.