



Handheld 3D Scanner for Hole & Countersink Inspection

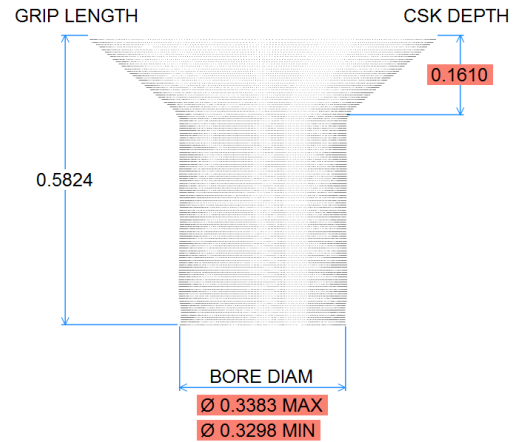
Product Information

The patent-protected handheld Aeroscan is a non-contact 3D scanner for hole and countersink inspection. Primary features include:

- Non-Contact Measurements
- Composite & Dissimilar Material Stack Scanning

The handheld Aeroscan 3D scanner can be used to measure drilled fastener holes while enabling seamless integration of a measurement solution throughout the factory. When integrated into the hand drill/countersinking process, the handheld Aeroscan significantly reduces time and improves the quality of the assembly process.

The future capability of the Aeroscan handheld will be extended to include advanced analytics and defect detection.



Units: Inches

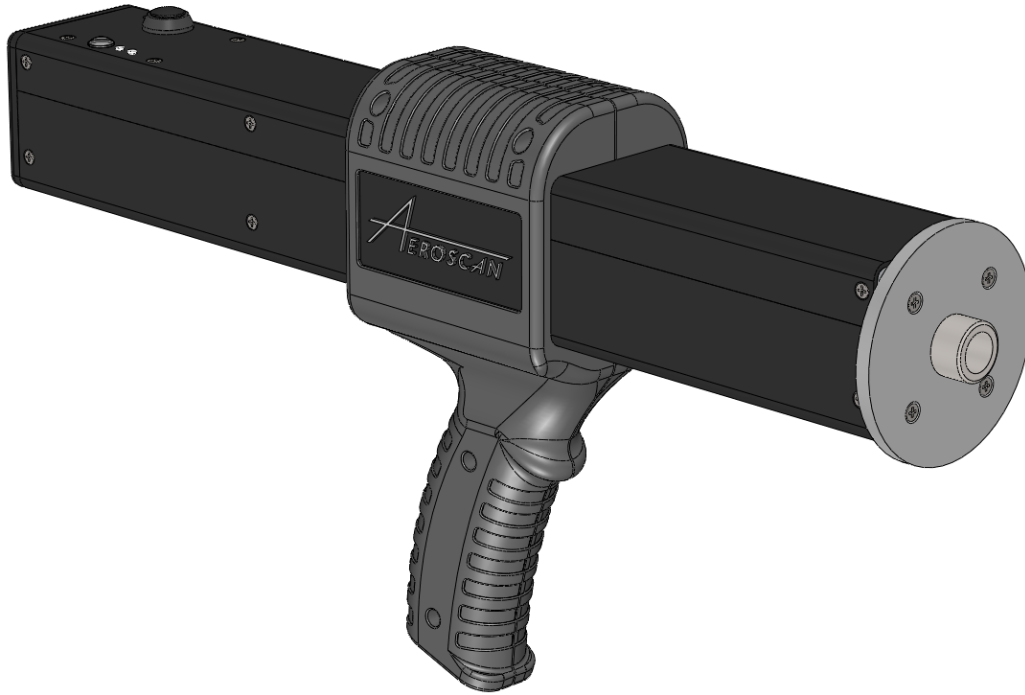
Point cloud visualization and dimensional analysis of a countersink multi-material stack.

Functionality & Capabilities

Measurement Devices/Gauges	Grip Length	Bore Gauge	Countersink Depth	Countersink Diameter	Capacitive Sensing	Confocal Sensing	Aeroscan
Grip Length	✓				✓		✓
Diameter		✓			✓	✓	✓
Countersink Depth/Diameter			✓	✓		✓	✓
Data Collection					✓	✓	✓
Composite Material	✓	✓	✓	✓			✓
Non-contact Measurement					✓	✓	✓
Multiple Hole Sizes per Device							✓

System Overview

The handheld Aeroscan takes all necessary measurements in a single scan, and can measure hole diameters from 0.189 - 0.850" (4.80 - 21.59 mm) without having to change gages.



Technical Specifications

Measurement capabilities:

Maximum material stack thickness	0.900" (22.9 mm)
Hole diameter	0.189 – 0.850" (4.80 – 21.59 mm)
Countersink Diameter	0.250 – 1.125" (6.35 – 28.58 mm)
Mixed material stacks of any arrangement	Aluminum, CFRP, and Titanium

Accuracy capabilities:

Countersink diameter/depth	±0.0006" (±15 µm)
Diameter overall (maximum and minimum)	±0.0002" (±5 µm)
Total stack thickness	±0.005" (±127 µm)

Manufacturer

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