

# Leap ST

# A Leap Forward in Handheld Scanning for Manufacturing and 3D Metrology Applications



### **Benefits**

### Accurate Results in Less Time, With Less Delay

With its exceptional area coverage and five modes of operation, Leap ST minimizes setup time and allows you to start capturing large surfaces, fine details, or deep geometries with less delay. Combined with an excellent data rate and the ability to use each mode separately or in combination with one another, you can scan parts in less time with the detail and accuracy needed.

### **Maximum Versatility**

Leap ST is designed to adapt to your growing needs with maximum versatility. The five modes allow for large part scanning, as well as complex, harder-to-access parts like deep holes and fine details common in an engine chassis, eliminating the need for additional metrology devices. The scanner is directly compatible with leading metrology software but can also be used with the available software development kit (SDK).

### Fast Setup, **Accurate Results**

Eliminate the need to move your part or bulky equipment. Save time and increase confidence in your results with the ability to scan a wide variety of parts and assemblies. With less time needed to prepare the part before scanning and to restore it to its original pre-preparation state, users can scan more parts faster, leading to greater throughput.

### **Trust Your Results**

the highest standards of accuracy and reliability. Certified according to the rigorous VDI/VDE 2634 standard, Leap ST ensures precise measurements that you can trust. Backed by ISO 17025 accredited calibration laboratories, this cutting-edge technology guarantees traceable and repeatable results.

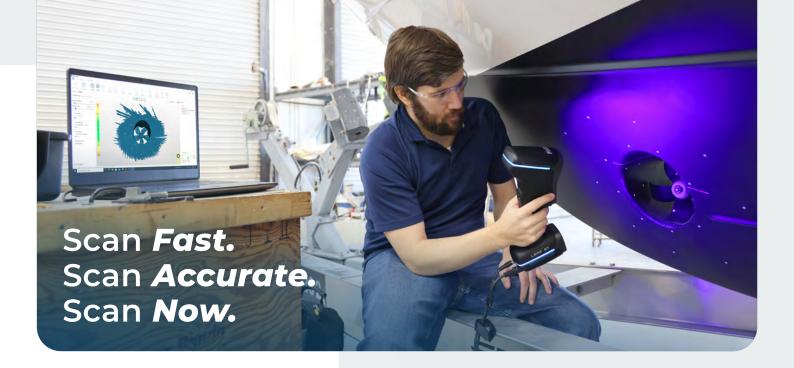
#### Scan Faster

All Leap ST scanners meet The optical configuration allows for a larger distance between targets, saving you time applying targets to your parts. The seamless switch between operating modes, directly on the device, enables users to continuously capture exactly what is needed without pausing the scan and go back to the computer.

### **HIGHLIGHTS**

- Ensure reliable measurement with the versatility to select from five operating modes
- Accelerate inspection without sacrificing accuracy
- Inspect more parts without increasing your cost-of-quality
- Catch more defects to reduce scrap and maximize production uptime
- Gather more data on production process trends to optimize quality





# 5 Scanning Modes

Leap ST\* represents a major advancement in handheld 3D metrology technology.

Designed as a compact, portable device, Leap ST can operate in five modes, offering versatility that benefit a wide variety of workflow applications and industries, ranging from aerospace and automotive to transportation equipment and metals fabrication and many more.

This unique adaptability ensures quick setup with fast time to data and high data quality.

Intuitive design makes Leap ST accessible to all skill levels



### **Ultra-fast Scanning**

Thirty-four laser lines enable fast coverage and greatly aid in identifying part features; best suited for small to medium-sized parts.



### **Hyper Fine Scanning**

Seven parallel laser lines allow high-resolution features to be added to a dataset, ideal for highly complex geometries or for larger scale scans where high resolution is required on a specific area/feature.



### Photogrammetry

While traditional photogrammetry requires several accessories, everything you need to perform photogrammetry with FARO Leap ST is inside the box, scale bars included.



### **Deep Hole Scanning**

Inspect challenging features and focus the unique laser line on geometries of interests in hard-to-reach areas. Ideal for any part with holes to be inspected to the maximum allowable depth.



### Large-area Scanning

Eleven parallel infrared laser lines can best be used to scan medium to large parts where only large features need to be inspected, or a first rough scan of a large part is required.

# **Software Compatibility**

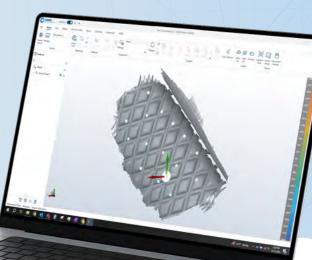
**FARO CAM2®** is the brand's powerful, intuitive and application-focused 3D measurement software platform.

Designed to enable users to fulfill their quality assurance and inspection tasks, CAM2 offers a portfolio of software offerings, each one tailored to meet specific manufacturing measurement needs.

This level of modularity, featuring two new software offerings, CAM2 Scan Professional and Expert, means users can avoid the headache and challenges associated with purchasing more software beyond their intended workflow.







Cost Savings

Due to the modularity of the solution, customers pay only for a software license that fits their needs.

CAM2 Scan
Professional is
the software
package designed
for laser scanning
devices only

Streamlined Operation
Users benefit from a dedicated solu

Users benefit from a dedicated solution for their 3D measurement device without additional software clutter.

All-mode Integration

One software is fully compatible with all five Leap ST operating modes.

# **Specifications**

Scan Mode	
Ultra-fast Scanning	34 blue laser lines
Hyper Fine Scanning	7 blue parallel laser lines
Large-area Scanning	11 parallel infrared laser lines
Deep Hole Scanning	1 blue laser line
Volume Accuracy	
Work Alone*	0.015 mm + 0.030 mm/m (0.0006 in + 0.00036 in/ft)
Work With 1 m Reference Bar*	0.015 mm + 0.020 mm/m (0.0006 in + 0.00024 in/ft)
Photogrammetry System	
Scanning Area	3760 mm x 3150 mm (148.0 in x 124.0 in)
Depth of Field	2500 mm (98.4 in)

<sup>\*</sup> Based on the VDI/VDE 2634 Part 3 standard

Technical Specifications	
Accuracy	Up to 0.020 mm (0.0008 in)
Scanning Rate up To	4,150,000 measurement/s
Scanning Area up To	1440 mm x 860 mm (57.0 in x 33.9 in)
Laser Class	CLASS II (eye-safe)
Resolution up To	0.010 mm (0.0004 in)
Stand-off Distance	300 mm (11.8 in)
Depth of Field up To	925 mm (36.4 in)
Output Formats	.asc, .igs, .txt, .stl
Operating Temperature Range	Minus 10° C - 40° C (14° F - 104° F)
Interface Mode	USB 3.0





## **Are You Ready To Make the Leap?**

Leap ST, with its maximized versatility and five modes of independent or complementary operation, is poised to become a market leader in this fast-growing subset of advanced metrology measurement tools.





