



GO ACCURATE. GO FAST. GO WIRELESS.

Time and motion tests comparing wireless data collection to handwritten and keyboard data recording prove the benefits of DataSure.* Not only does DataSure capture data with zero failures, but it significantly saves time and money. A wireless system also eliminates wire-related placement, installation, safety, and cost issues.

A SAMPLE APPLICATION

Manual Data Recording: Pen and Paper

62 ENTRY ERRORS

22 time/motion elements
@ 19.7 seconds per part

Transcription (data entry):
15 time/motion elements
@ 9.2 seconds per part

Total: 37 time/motion elements for
a total of 28.9 seconds per part

Factors Affecting Accuracy and Throughput:

- Measurement must stop in order to be recorded
- Illegible handwritten numbers
- Recording data is often shorthand
- Mistakes noted but not corrected
- The value can change when the inspector releases the caliper
- Additional errors occurred with transcription at the PC
- The inspector's handwriting was sometimes misread by the transcriber (usually someone other than the inspector)

Manual Data Recording: Keyboard Results To PC

4 ENTRY ERRORS

20 time/motion elements
@ 15.3 seconds per part

Factors Affecting Accuracy and Throughput:

- Measurement must be suspended in order to record measurement
- Missed or incorrect keystrokes
- Incorrect cell entry on spreadsheet/form
- When measuring, the value can change when the inspector releases the caliper
- The caliper is not seated correctly when released to key-in a measurement

Wireless Data Collection With DataSure

0 ENTRY ERRORS

17 time/motion elements
@ 6.6 seconds per part

Factors Affecting Accuracy and Throughput:

- Measurement technique is maintained while capturing the measurement
- No interpretation or memory errors
- Requires ordered repository for data – spreadsheet, etc.
- High efficiency with some repetition effects

DataSure Is Backed By Expert Starrett Support

Starrett and its distribution partners are always available to help you make the most of the DataSure Wireless Data Collection Solution for your shop. It starts with an evaluation of your specific needs and a ROI analysis to demonstrate payback. It's followed by expert installation advice and assistance to make sure you get your system up and running immediately. If required, training and after-sales support services help users easily transition to the new solution.

System Specifications

	Gateway	Router	End Node
Features	USB connection sends data to application or database multi-file export features unique system ID	range extender transmits around interference wall mount or mobile	end user feedback on-tool data storage adapts to many tools compact design
Power	USB	AC power and NiMH battery backup	CR2450 lithium
Range <i>dependent on environment</i>	100 ft (30 m)	100 ft (30 m)	65 ft (20 m)
Dimensions	7.0 x 5.5 x 2.5 inches (178 x 140 x 63.5 mm)	7.0 x 5.5 x 2.5 inches (178 x 140 x 63.5 mm)	2.18 x 1.7 x 0.7 inches (55.3 x 43.2 x 17.8 mm)

Athol, MA 01331

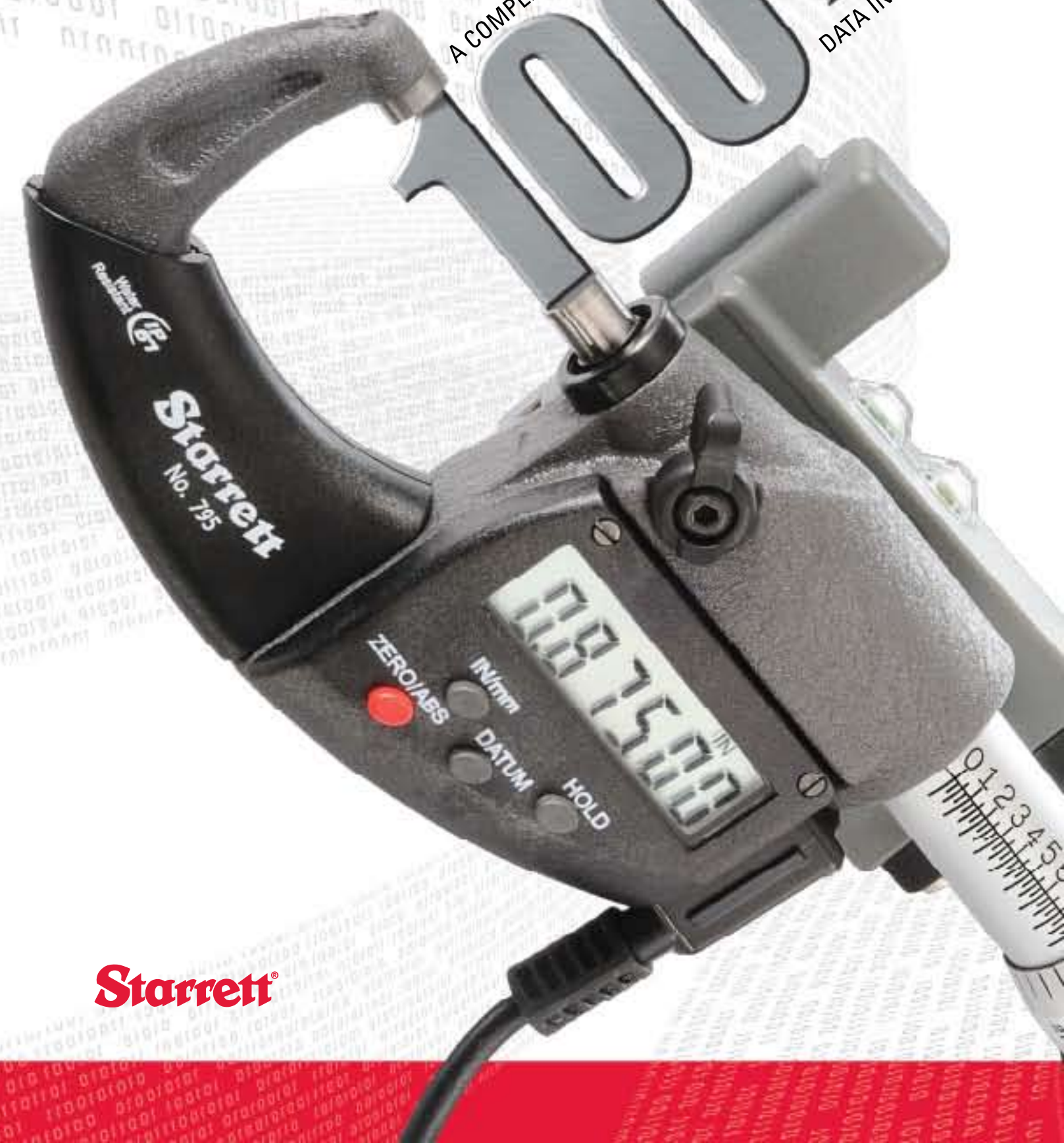
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Specifications subject to change. Bulletin No. 578. 10M/C. 06/09.

DataSure[®]
WIRELESS DATA COLLECTION



A COMPLETE SOLUTION TO ENSURE
1000%
DATA INTEGRITY.

Starrett

* This test compares DataSure with two common non-wireless procedures. It was designed to closely simulate actual production, involving 500 parts with three measurements each. With DataSure, all three measurements and data recording were done in an average time of 6.6 seconds per part with no data errors. The results for the other methods are as illustrated above.

Test involved documenting each of the discrete time and motion elements and determining an elapsed time value. Three features on 500 parts were measured and recorded for each method.

5,000,000 measurements.

ZERO data failures.* That's

DataSure.®

Manual Data Collection Can Be Costly

Let's face it, humans aren't perfect. If you're collecting inspection data manually, errors are inevitable. Hand writing or keying in data leads to mistakes that ultimately result in costly scrap, excess inventory or worse – parts rejected by your customers. Starrett's DataSure Wireless Data Collection System virtually eliminates these problems.

100% Error-Free Data Collection – Fast

DataSure lets you perform real-time, 100% error-free data collection. Even after over 5 million measurements, users report zero data failures. It's fast, too. Data can be collected and analyzed up to 5 times faster than other methods. So you not only ensure precise part quality and reduce costs, you can serve your customers better.

HOW A DATASURE WIRELESS NETWORK WORKS

DataSure End Nodes, attached to individual tools throughout the shop, collect data and send it to the nearest router, which transmits it to the PC Gateway (or data can go directly to the Gateway). The Gateway confirms receipt of the data by sending a signal back to the tool End Node. Even if the main system is down or busy, up to ten readings can be stored right in the End Node.

DataSure Advanced System

- Backward compatible with 1st generation radios and hardware
- Installs on PCs with Windows XP or newer operating systems
- Supports DDE for direct Microsoft Excel interface
- Fast response to measurements

Far-Reaching Accuracy

The DataSure Gateway has a range of up to 100 feet (30 meters) and accommodates up to 100 tools.

As the central point for data collection and tool management, it simply plugs into your PC via a USB port.

Easy Set-Up

DataSure installs quickly on your standard PC and works with most popular SPC software. Monitor data collection remotely over your LAN for greater control. Output data to your SPC software or download it to your preferred file formats. You can also set up data multiplexers, direct data log files to your application, label tools by user or work cell and configure archive times. DataSure not only works with Starrett electronic measuring tools, but also Mitutoyo, Sylvac, CDI Tools, Mahr, Tesa and other tool brands.

Hard-To-Ignore Savings

The repetitive hand movements required to pick up tools, measure parts, put everything back down and record results is a major time drain – and there's no guarantee the data will be accurate. With DataSure, it's fast, direct, and 100% reliable. Just measure and send. If you take the time you save using DataSure, multiply it by your labor rate, and factor in what you save by eliminating errors, DataSure will pay for itself over and over again.

Multi-Tool Efficiency

DataSure is scalable from one tool with an End Node radio and a Gateway at a computer to multi-tool systems spread over wide distances utilizing several routers to extend range and assure data integrity. Only DataSure works with all major manufacturers' tools with output.

The Route of Least Resistance

Each DataSure Router extends the system's range up to 100 feet (30 meters) and can accommodate 25 to 50 tools.

Wide Compatibility

End Nodes are available for a wide variety of tools with output.

Improved 2nd Generation End Node

With the push of a button, readings are sent, time-stamped and logged into a database. DataSure immediately sends a message back to the tool confirming receipt.

- IP67 protection against coolant and contaminants
- Supports all the same tools as 1st generation End Nodes
- Field replaceable cables
- Smaller and faster than 1st generation