

# Starrett®

Precision, Quality, Innovation

## WIRELESS DATA COLLECTION

INTRODUCING  
**DataSure® 4.0**



# New DataSure® 4.0

## The most complete, scalable, secure and robust Wireless Data Collection System

With unprecedented range and data security, multiple gateways, compact size and high speed, Starrett, a forerunner in the development of data collection solutions for quality control manufacturing applications, has taken data acquisition to a new level with DataSure 4.0.

The new Starrett DataSure 4.0 System operates on the latest wireless networking technology that uses short-wave radio frequencies to interconnect cell phones, computers and wireless electronic devices, enabling much faster speed, greater bandwidth and longer range for higher data throughput.

**The range of DataSure 4.0 is ten to twenty times that of any data collection system on the market.**

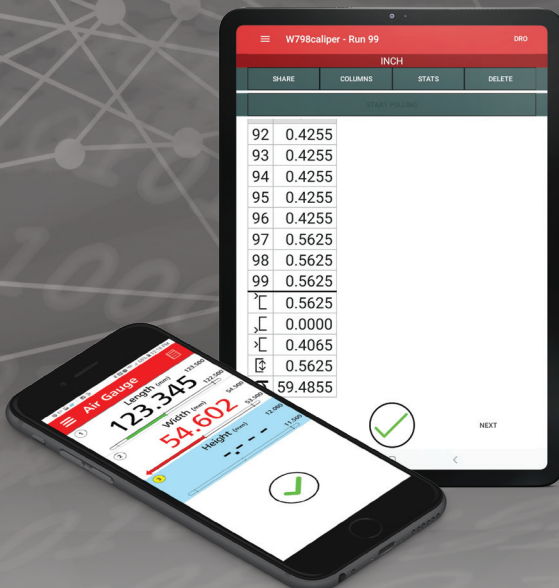


W798 Calipers

### With All-New Starrett Wireless Gages



W733.1 Micrometers



For wireless tools, see pages 9-16

# Fast, Smart

**DataSure 4.0 features higher bit rates and a very high-speed connection of less than 50ms of data travel time, and has an ultra-low latency network that enables high data volumes to be processed without delay, even at full capacity.**

Users of DataSure 4.0 can versatily utilize multiple gateways which serve as central or distributed points for data collection, versus conventional systems that have only one gateway. The compact new gateways and repeaters can easily fit in the palm of a hand.

With DataSure 4.0, a new network topology can be configured to many simple or complex situations and distributed remote gateways can also be utilized.



W2900 Indicators



## Secure



**DataSure 4.0 is built on a highly secure proprietary wireless platform. Transmitted data is encrypted in a multi-layered approach that prevents any outside access.**

- Data is transmitted from gages that have either built-in radio transmitters or externally-mounted end nodes to gateways.
- Operable on Android or IOS mobile platforms and Windows® based computers including laptops, desktop PCs, thin client PCs, and servers.
- DataSure 4.0 is compatible with all Starrett electronic digital gages, as well as electronic gages of other tool manufacturers.
- Datasure 4.0 End Nodes and Wireless Tools are rechargeable, eliminating battery replacement and associated costs.
- The new Starrett Wireless Tools, as well as the DataSure 4.0 End Nodes include an IP67 level of protection for use in harsh shop environments.

# DATA SURE® 4.0 WIRELESS DATA COLLECTION

## HARDWARE

The Starrett DataSure 4.0 software application uses a wireless network to gather information from multiple tools. The wireless network relies on the elements or nodes to gather and then relay data back to the PC. The DataSure 4.0 program can also send signals out to the network components to verify transmissions and request data. The hardware components of the system are the: USB Gateway, Remote Gateway, Bridge Extenders, and End Node/s. The End Node is a radio transmitter/receiver attached to a tool. The USB Gateway is a radio transmitter/receiver attached to a PC. The Remote Gateway is the same as the USB Gateway but also extends the communication range from the PC, by using a Bridge extender to boost the signals between the Remote Gateway, and the PC. The Remote Gateway has the same range as the USB Gateway but can be setup very far away from the PC.



### 1400 SERIES SYSTEM

- Adapts to most existing SPC, MRP, and ERP programs
- Radio system works with Starrett, Mitutoyo, Sylvac, Fowler, Bowers, and CDI Tools
- One Gateway system handles up to 20 tools, primarily calipers, micrometers, and indicators
- Additional Remote Gateways will expand number of tools supported in increments of 20 each, and Repeater can increase range to miles
- End Node radios can store up to 10 readings if the main system is down or busy
- Operating distance from gateways up to 61 meters (200 feet) for end nodes
- Operating distance from gateways or mobile device up to 9 meters (30 feet) for wireless tools
- Broadcast range up to 610 meters (2,000 feet) between Remote Gateways and Bridge
- End Nodes and wireless tools include rechargeable batteries
- Up to 20 virtual multiplexers
- System status feedback on the End Node, including acknowledgement of the data received
- Network and tool status, battery monitoring automatically recorded on screen
- Remote access over a LAN to DataSure 4.0 Server via Remote client software (provided)
- Optional antenna types for various deployments

## DATA SURE SOFTWARE FOR WINDOWS

DataSure Wireless Data Collection Software connects and manages your tools, network, data, and third party SPC applications.

- Monitors your wireless network, tools, system status, end node battery voltages and tools measurements all from one screen
- Measurements can be initiated and viewed directly from the home page
- Data can be exported in CSV format
- Data is stored on a local or network database with programmable, scheduled backup
- Remote personnel can configure tools, export data and monitor activity via intranet with no additional software
- Virtual multiplexers allow data to be directed from specific tools to multiple software applications
- Each radio end node can be personalized with a descriptive name
- Drag and Drop tools on multiplexers
- Fast and easy label changes for tools
- Fast response for measurement
- System OS Requirements: Windows® 7 32 bit, Windows® 7 64 bit, Windows® 8, Windows® 10
- Data can also connect directly to your SPC/MRP/ERP application via com port or DDE (Dynamic Data Exchange) line

## DATA SURE MOBILE APP

- iOS and Android
- DRO & Data log features
- Supports 5-8 tools (mobile device dependant)
- Modify measurements with user customizable formulas
- Export via email, SMS, Airdrop

### ICON LEGEND



#### Industry 4.0

Equipped with an output to allow for connection to wired or wireless data collection systems. Useful for quality control and tracking.



#### IP Protection

An IP number is composed of two numbers, the first referring to protection against solid objects and the second against liquids.

**First number 6:** High level protection against dust  
**Second number 7:** Protection against submersion in water up to 1 meter of depth for 30 minutes



#### Wireless

Internal/ embedded wireless communication capability.

# ZERO Data Failures. That's DataSure 4.0®

## EASY SET-UP

DataSure installs quickly on your standard PC and is easy to setup. Utilizing virtual COM ports, most popular SPC software can access real time measurement data for better quality control. 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.

## IMPROVED 3RD 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 2nd generation End Nodes
- Field replaceable cables
- Faster and longer distance than 2nd generation



## 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 remote gateways to extend range and assure data integrity. **MicroRidge works with all major tool manufacturers.**

## WIDE COMPATIBILITY

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



# DATA SURE® 4.0 FACTORY FLOOR

## SOFTWARE

DataSure Wireless Data Collection Software connects and manages your tools, network, data, and third party SPC applications.

### DATA SURE® "PORTABLE" SCHEME



Backpack end node



- 5-8 Tools - (backpacks AND embedded radios)
- Mobile App running DataSure Mobile (required)
- Wireless tools range: 30' / 10 meters



**Starrett Wireless App**  
Running on mobile device



**TOTAL RANGE:**  
30' / 10 meters

### DATA SURE® "SMART 30-200" SCHEME

Backpack end node

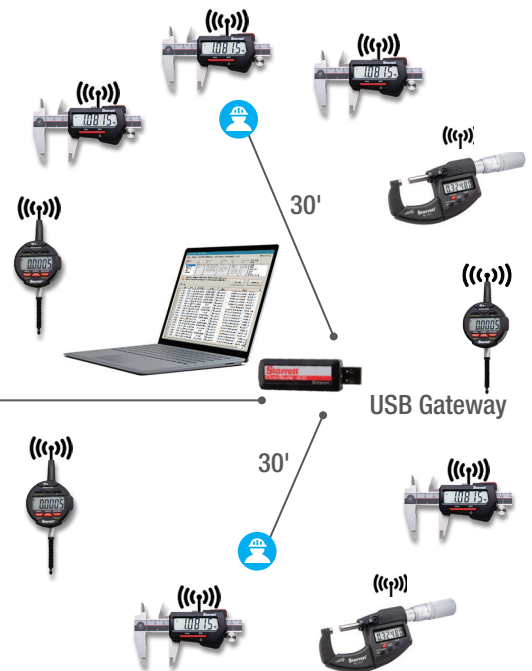


Backpack end node

- 20 Tools - uses 1 USB Gateway
- Computer/laptop running DataSure 4.0
- Backpacks range: 200' / 60 meters
- Wireless tools range: 30' / 10 meters

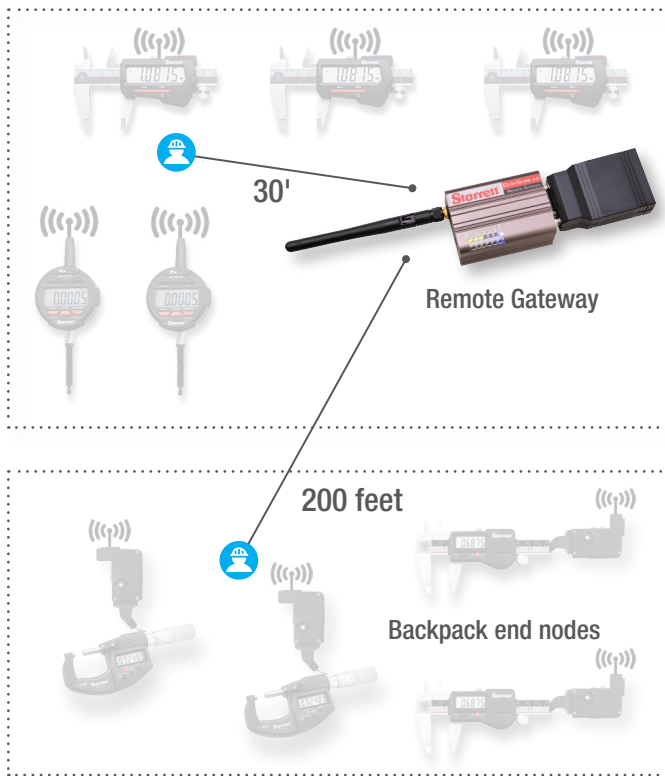


**TOTAL RANGE:**  
200' / 60 meters



# DATA SURE® 4.0 FACTORY FLOOR

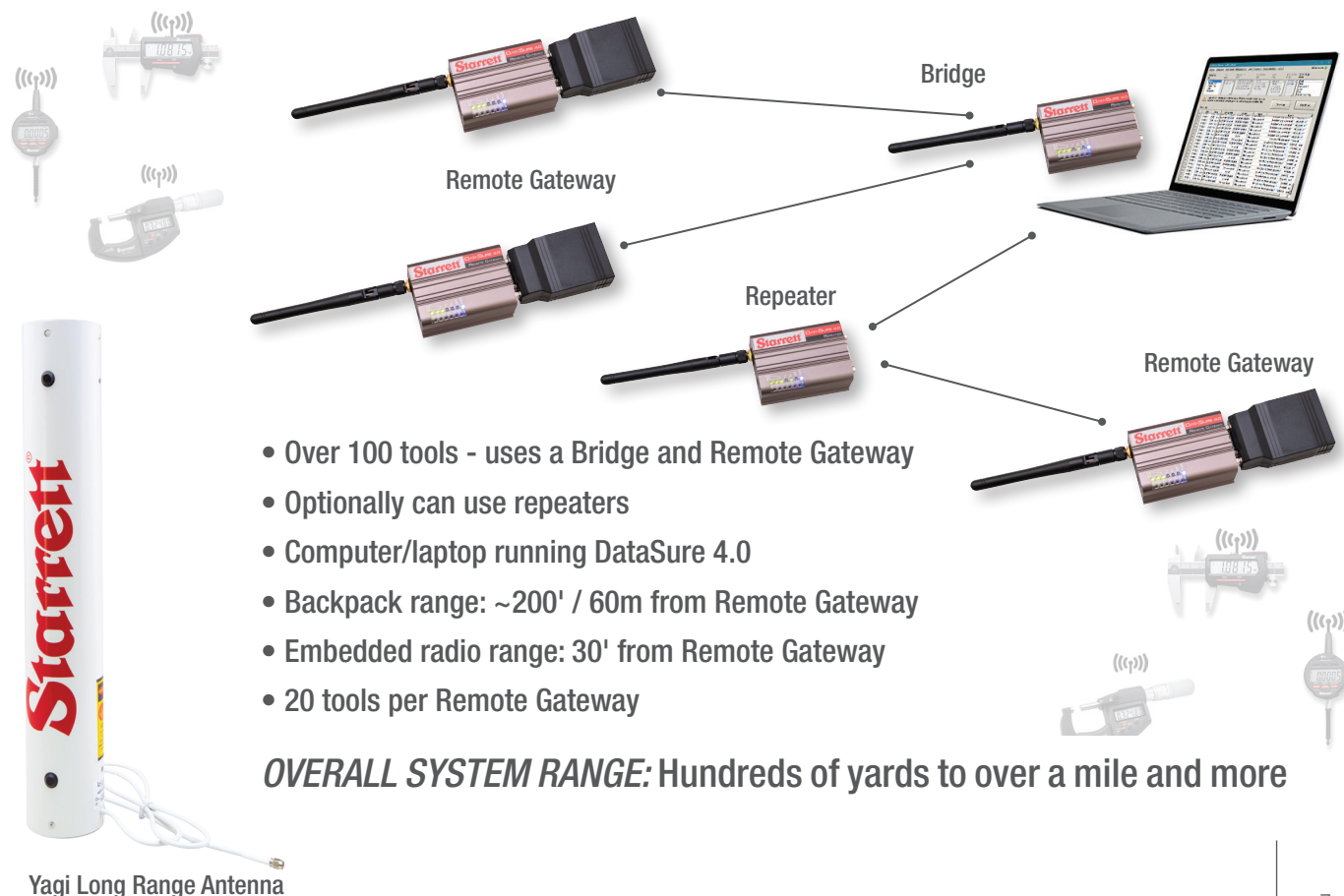
## DATA SURE® "LARGE FACTORY" SCHEME



- 20 tools total - uses a Bridge & Remote Gateway
- Computer/laptop running DataSure 4.0
- Backpack range: ~200' / 60 meter
- Wireless tool range: 30' / 10 meter

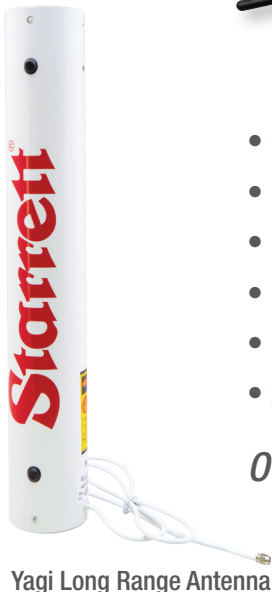
**OVERALL SYSTEM RANGE:**  
Hundreds of feet to hundreds of yards

## DATA SURE® "VERY LARGE DEPLOYMENT" SCHEME



- Over 100 tools - uses a Bridge and Remote Gateway
- Optionally can use repeaters
- Computer/laptop running DataSure 4.0
- Backpack range: ~200' / 60m from Remote Gateway
- Embedded radio range: 30' from Remote Gateway
- 20 tools per Remote Gateway

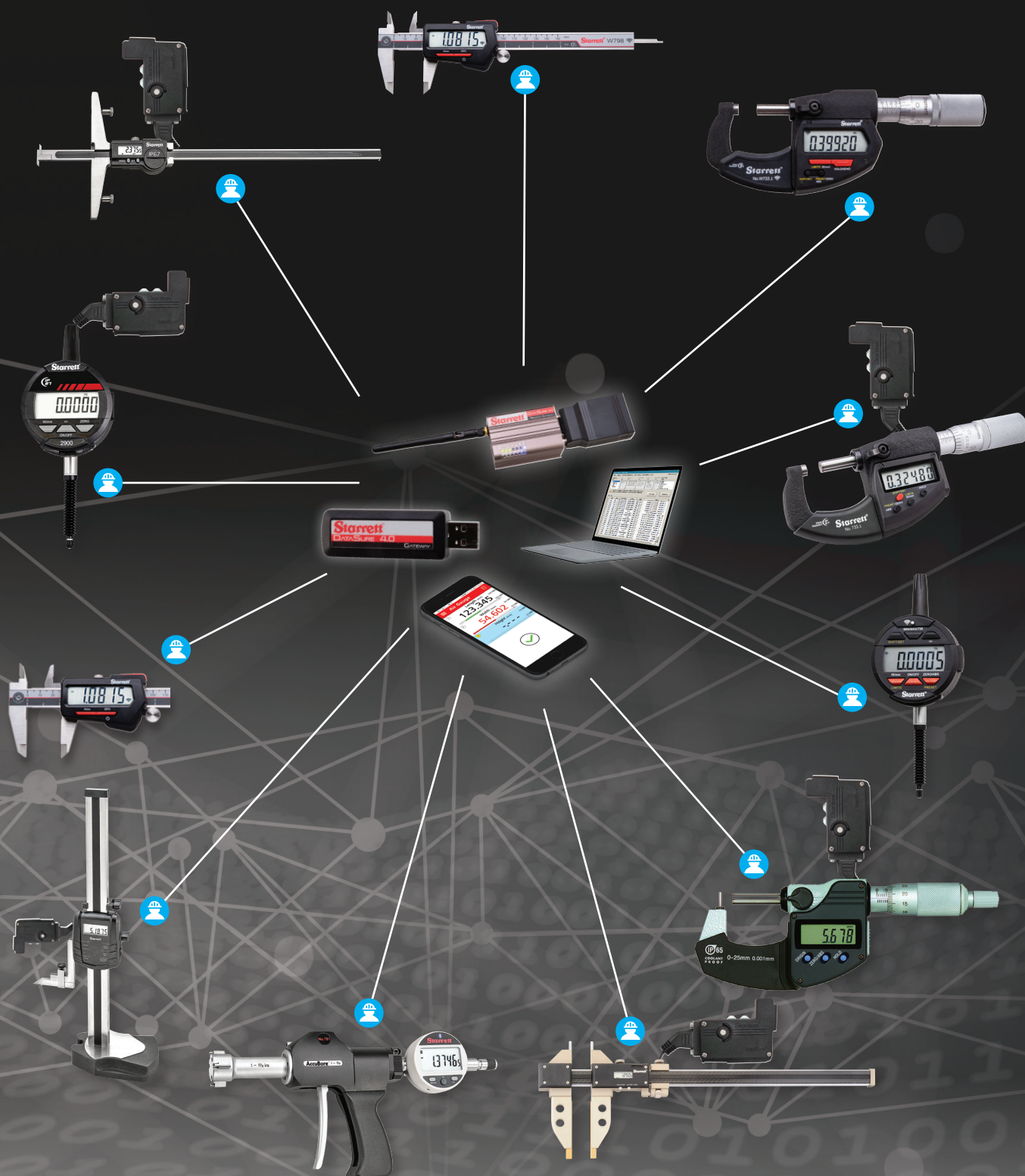
**OVERALL SYSTEM RANGE:** Hundreds of yards to over a mile and more



Yagi Long Range Antenna

# FLEXIBLE AND COMPLETE SELECTIONS

DATA SURE 4.0



# DATA SURE® 4.0 PART NUMBERS

IP67



DATA SURE 4.0

## Wireless Network Components

	Part No.	Name	Description
	1400MA	DataSure 4.0 Mobile App	Supports Android and iOS platforms
	1400	DataSure 4.0 Software	New PC server and client software V 4.0
	1401	USB Gateway	A USB dongle radio, a little bigger than a typical USB thumb drive
	1402B	Bridge	A powerful radio extender used to multiply the distance of the wireless network. This unit plugs into a USB port on the main PC running DataSure® 4.0. Part of the Remote Gateway network
	1402R	Repeater	Similar to the Bridge, this unit can be used alone or combined with other repeaters.
	1403-n	End Node	A backpack radio that attaches to a tool to transmit data to a Gateway. The "n" is the designation number that corresponds to the type of tool which it is attached
	1404	Remote Gateway	This unit is a combination of a Gateway and a Radio Extender. This setup enables the gateway to operate at an extended distance from the main PC. This unit is paired with a Bridge that is attached to the main PC
	PT63468	Demo Kit	A full kit to demonstrate all DataSure needs. Kit includes 733.1XFL-1, W733.1XFL-1, 798B-6/15, W798B-6/15, 2900-3-1, W2900-3-1, Gateways, Bridge, Repeater, End Node, Replacement Cable

## DataSure 4.0 End Nodes and Connectors

End Node		Replacement Connector		
Cat. No.	EDP	Cat. No.	EDP	Compatible Tools
1403-1N	70094	PT63297-1N	12546	Starrett Opto, 797 Series, 781 2-Button
1403-3N	70087	PT63299-3N	12548	Starrett 3rd Gen., 733 Style Micrometer Head
1403-4N	70165	PT63300-4N	12549	Starrett 2700 Series
1403-5N	70168	PT63301-5N	12550	Starrett Cat. No. 2000 Series
1403-6N	70372	PT63302-6N	12551	Mitutoyo 6-Pin Round
1403-7N	70096	PT63303-7N	12552	Mitutoyo with and without Absolute Encoder
1403-8N	70400	PT63304-8N	12553	RS232, DB9 Tools with TX, RX, GND
1403-9N	70088	PT63305-9N	12554	Mitutoyo 500-6XX, 500-7XX Series
1403-13N	70167	PT63309-13N	12558	Mitutoyo 543-5XX Series
1403-14N	70630	PT63310-14N	12559	Mahr-Federal with µMaxum and XL
1403-15N	70237	PT63311-15N	12560	Starrett 782, 781, 797 Series, TESA-CAL, TESA Intrimik
1403-16N	70927	PT63312-16N	12561	Mahr-Federal EX
1403-18N	70093	PT63389-18N	12562	Starrett Proximity 770B Micrometers, 798 Calipers, and 781 3-Button
1403-19N	71000			Mitutoyo Digimatic Absolute
1403-20N	70933	PT63533-20N	73320	TESA Microhite
1403-21N	70166	PT63536-21N	73324	Starrett 2900 Series
1403-22N	71031	PT63706-22N	73325	Bowers 780 Bore Gage
1403-23N	70095	PT63660-23N	12547	Starrett EC799 Slide Caliper
1403-24N	70092	PT63473-24N	73327	Starrett 733.1 Series

## DataSure 4.0 Accessories

Cat. No.	EDP	Description
PT64052	73343	Yagi Antenna - DataSure 4.0
PT64133	73345	Mounting Bracket Kit for Bridge/Repeater or Remote Gateway
PT64155	73346	D89 to D89 Cable - Remote Gateway
PT64186	60022	Monopole Antenna for Bridge 1402B, Repeater 1402R, Remote Gateway 1404
PT64187	60023	Patch Antenna for Bridge 1402B, Repeater 1402R, Remote Gateway 1404
PT64177	60021	Rubber Ducky Antenna
PT64175	60010	DB9 to DB9 Null modem for Repeater 1402R
PT64054	60024	Replacement USB to Bridge cable
PT64036	60009	USB Power supply with USB micro B cable
PT64176	60020	Power supply for Bridge, Repeater, or Remote Gateway

# ELECTRONIC CALIPERS

## W798 ELECTRONIC CALIPERS

0-12"/(0-300MM)

Starrett innovation brings a truly wireless slide caliper. Keeping with the same features as the 798B electronic slide calipers, these are now equipped to send data with the push of a button. IP67 ratings across the entire range to help protect against coolant, water, chips, dirt and dust.

798 Electronic Calipers			
Cat. No.	EDP	Range	
W798B-6/150	73330	0-6"/0-150mm	
W798B-8/200	73331	0-8"/0-200mm	
W798B-12/300	73328	0-12"/0-300mm	
Approximate Jaw Depths for 798 Electronic Calipers			
	6" (150mm)	8" (200mm)	12" (300mm)
OUTSIDE	1-1/2" (38mm)	1-7/8" (47.6mm)	2-1/2" (63.5mm)
INSIDE	5/8" (16mm)	3/4" (19mm)	3/4" (19mm)



W798B-6/150

## FEATURES AND SPECIFICATIONS

- Large easy to read high contrast LCD digital readout
- IP67 Protection
- Thumb roll
- Hardened stainless steel measuring surfaces
- Induction type linear encoder system
- Auto Off after 20 minutes of nonuse
- Inch/millimeter conversion
- Slide lock
- Zero at any position
- Reactivation of display with no loss of position
- Rechargeable battery port
- Embedded radio allows to send data up to 30' with no end nodes or cables



# ELECTRONIC INDICATORS

## W2900 ELECTRONIC INDICATORS

0-4"/(0-100MM)

Starrett innovation brings a truly wireless indicator, keeping with the same features as the 2900 electronic indicators, these are now equipped to send data with the push of a button, no cables needed. IP67 ratings across the entire range to help protect against coolant, water, chips, dirt and dust.

## FEATURES AND SPECIFICATIONS

- Intuitive design and layout-easy to learn and use
- IP67 Protection
- Positive, tactile-free button activation
- CE compliant
- Origin set, zero set
- Auto Off after 20 minutes of nonuse
- Inch/millimeter conversion
- Lug on Center back
- Flat back included
- Rechargeable battery port
- Embedded radio allows to send data up to 30' with no end nodes or cables
- True Absolute sensor technology -1 and -6 models only



W2900 5-1



# ELECTRONIC INDICATORS

## W2900 ELECTRONIC INDICATORS

Inch/Metric-.375" Stem-#4-48 UNF Thread				
Cat. No.	EDP	Range	Resolution	Accuracy
W2900-1	60730	.500" / 12mm	.00005"/0.001mm	+/- .00005"/0.001mm
W2900-6	60731	.500" / 12mm	.0005/.0001/.00005"/0.01/0.001mm	+/- .00005"/0.001mm
W2900-1-1	60750	1" / 25mm	.00005"/0.001mm	+/- .00005"/0.001mm
W2900-3-1	73347	1" / 25mm	.0005"/0.01mm	+/- .001"/0.03mm
W2900-5-1	73349	1" / 25mm	.0005"/0.01mm	+/- .001"/0.03mm
W2900-6-1	60798	1" / 25mm	.0005/.0001/.00005"/0.01/0.001mm	+/- .00005"/0.001mm
W2900-1-2	60799	2" / 50mm	.00005"/0.001mm	+/- .00005"/0.001mm
W2900-6-2	60846	2" / 50mm	.0005/.0001/.00005"/0.01/0.001mm	+/- .00005"/0.001mm
W2900-1-4	62327	4" / 100mm	.00005"/0.001mm	+/- .00005"/0.001mm
W2900-6-4	62179	4" / 100mm	.0005/.0001/.00005"/0.01/0.001mm	+/- .00005"/0.001mm
W2900-1ME	62212	12mm / .500"	.00005"/0.001mm	+/- 0.001mm/.00005"
W2900-6ME	62213	12mm / .500"	.0005/.0001/.00005"/0.01/0.001mm	+/- 0.001mm/.00005"
W2900-1ME-25	62214	25mm / 1"	.00005"/0.001mm	+/- 0.001mm/.00005"
W2900-6ME-25	62217	25mm / 1"	.0005/.0001/.00005"/0.01/0.001mm	+/- 0.001mm/.00005"
W2900-1ME-50	62218	50mm / 2"	.00005"/0.001mm	+/- 0.001mm/.00005"
W2900-6ME-50	62219	50mm / 2"	.0005/.0001/.00005"/0.01/0.001mm	+/- 0.001mm/.00005"
W2900-1M	62224	12mm	0.001mm	+/- 0.001mm
W2900-6M	62225	12mm	0.01/0.001mm	+/- 0.001mm
W2900-1M-25	62226	25mm	0.001mm	+/- 0.001mm
W2900-3M-25	73348	25mm	0.01mm	+/-0.03mm
W2900-5M-25	73378	25mm	0.01mm	+/-0.03mm
W2900-6M-25	62227	25mm	0.01/0.001mm	+/- 0.001mm
W2900-1M-50	62228	50mm	0.001mm	+/- 0.001mm
W2900-6M-50	62229	50mm	0.01/0.001mm	+/- 0.001mm

## ELECTRONIC PORTABLE THICKNESS GAGE

### W1015 ELECTRONIC THICKNESS GAGE

#### 0-1" (0-25MM)

After inserting work between the measuring contacts, releasing the lever will cause the spindle to contact the work, giving an accurate size reading because measuring pressure is independent of the user. The contacts edges are radiused to prevent the work from being marred or deflected. The flat contact area measures 1/4" (6.3mm) in diameter and is 1/8" (3mm) thick.

Special contacts sizes and shapes are available by request.

Now available with digital readout and embedded radio to allow for data transmission up to 30'.

#### FEATURES AND SPECIFICATIONS

- Intuitive design and layout-easy to learn and use
- Positive tactile-feel button activation
- Long Battery life
- Origin set, zero set
- Auto Off after 20 minutes of non use
- Counting direction switching (+/-)
- Accuracy +/- .001" (+/-0.03mm)
- Inch/millimeter conversion
- Rechargeable battery port
- Embedded radio allows to send data up to 30' with no end nodes or cables



E1015 Electronic Portable Thickness Gage, Inch Reading					
Cat. No.	EDP	Throat Depth	Range	Resolution	Indicator Model Number
W1015BZ	62328	2-1/2"	1"/25mm	.0005" / 0.01mm	W2900-5-1
W1015BZ-4	62329	4"			
W1015BZ-6	62330	6"			

# ELECTRONIC MICROMETERS

## W733.1XFLZ ELECTRONIC OUTSIDE MICROMETER

0-6"/0-100MM

Starrett innovation brings a truly wireless micrometer. Keeping with the same features as the 733.1 electronic micrometers, these are now equipped to send data with the push of a button. IP67 ratings (1-4"/0-100MM models) to help protect against coolant, water, chips, dirt and dust.

### W733.1 Electronic Outside Micrometer with Inch Grads

Cat. No.	EDP	Range
W733.1XFL-1	60585	0-1"
W733.1XFLZ-2	60586	1-2"
W733.1XFLZ-3	60587	2-3"
W733.1XFLZ-4	60588	3-4"
W733.1XFLZ-5	60589	4-5"
W733.1XFLZ-6	60590	5-6"
SW733.1BXFLZ	60608	0-6" micrometer set

### W733.1 Electronic Outside Micrometer with Metric Grads

Cat. No.	EDP	Description
W733.1MEXFL-25	60582	0-25mm
W733.1MEXFLZ-50	60583	25-50mm
W733.1MEXFLZ-75	60584	50-75mm
W733.1MEXFLZ-100	60581	75-100mm

All W733.1 Micrometers include a protective case.

All except 1" & 25mm sizes furnished with standards.

## FEATURES AND SPECIFICATIONS

- Large easy to read high contrast LCD digital readout
- Starrett no-glare satin chrome finish on thimble and sleeve
- Balanced and tapered frame
- Extremely hard one-piece spindle-the heart of our accuracy!
- Micro-lapped carbide measuring surfaces
- Auto Off after 20 minutes of nonuse
- Inch/millimeter conversion
- Measurement HOLD button
- Zero at any position
- Retain and return to true zero reading
- Accuracy  $\pm .0001"$  ( $\pm 0.002\text{mm}$ )
- Resolution  $.00005"$  ( $0.001\text{mm}$ )
- Rechargeable battery
- Embedded radio allows to send data up to 30' with no end nodes or cables
- IP67 rating (1-4" Models)
- Ability to set minimum and maximum limits



W733.1XFL-1



# ELECTRONIC MICROMETERS

## W714.1 ELECTRONIC INTERCHANGEABLE ANVIL OUTSIDE MICROMETER

0-12"

Starrett innovation brings a truly wireless micrometer. Keeping with the same features as the 714.1 electronic micrometers, these are now equipped to send data with the push of a button.

### W714.1 Electronic Interchangeable Anvil Outside Micrometer with Inch Grads

Cat. No.	EDP	Range
W714.1AFLZ	60578	0-4"
W714.1AFLZ	60579	2-6"
W714.1GFLZ	60580	6-12"

Adjusting wrenches furnished with each tool  
Micrometer furnished in protective case with 234 standards



### FEATURES AND SPECIFICATIONS

- Large easy to read high contrast LCD digital readout
- Starrett no-glare satin chrome finish on thimble and sleeve
- Balanced and tapered frame
- Extremely hard one-piece spindle-the heart of our accuracy!
- Auto Off after 20 minutes of nonuse
- Inch/millimeter conversion
- Measurement HOLD button
- Zero at any position
- Retain and return to true zero reading
- Accuracy  $\pm .0001"$  ( $\pm 0.002\text{mm}$ )
- Resolution  $.00005"$  ( $0.001\text{mm}$ )
- Rechargeable battery
- Embedded radio allows to send data up to 30' with no end nodes or cables



## W790.1 ELECTRONIC MULTI ANVIL MICROMETER

0-1"

Starrett innovation brings a truly wireless micrometer. Keeping with the same features as the 790.1 electronic micrometers, these are now equipped to send data with the push of a button.

### W790.1 Electronic Multi Anvil Micrometers with Inch Grads

Cat. No.	EDP	Range
W790.1AFL-1	60604	0-1"

Furnished with two hardened anvils-round anvil approximately .120 diameter and flat anvil approximately .125" thick  
V-Anvil only, order PT13017 (EDP 71399)



### FEATURES AND SPECIFICATIONS

- Large easy to read high contrast LCD digital readout
- Starrett no-glare satin chrome finish on thimble and sleeve
- Balanced and tapered frame
- Extremely hard one-piece spindle-the heart of our accuracy!
- Micro-lapped carbide measuring surface
- Auto Off after 20 minutes of nonuse
- Inch/millimeter conversion
- Measurement HOLD button
- Zero at any position
- Retain and return to true zero reading
- Accuracy  $\pm .0001"$  ( $\pm 0.002\text{mm}$ )
- Resolution  $.00005"$  ( $0.001\text{mm}$ )
- Rechargeable battery port
- Embedded radio allows to send data up to 30' with no end nodes or cables



# ELECTRONIC MICROMETERS

## W764.1 ELECTRONIC SHEET METAL MICROMETER

0-1"

Starrett innovation brings a truly wireless micrometer. Keeping with the same features as the 764.1 electronic micrometers, these are now equipped to send data with the push of a button.

### W764.1 Electronic Sheet Metal Micrometer with Inch Grads

Cat. No.	EDP	Range
W764.1AXFL-1	60597	0-1"

Packed one in a box without case  
Flat anvil for Metric available upon request



### FEATURES AND SPECIFICATIONS

- Large easy to read high contrast LCD digital readout
- Starrett no-glare satin chrome finish on thimble and sleeve
- Balanced and tapered frame
- Extremely hard one-piece spindle-the heart of our accuracy!
- Micro-lapped carbide measuring surfaces
- Auto Off after 20 minutes of nonuse
- Inch/millimeter conversion
- Measurement HOLD button
- Zero at any position
- Retain and return to true zero reading
- Accuracy  $\pm .0001"$  ( $\pm 0.002\text{mm}$ )
- Resolution  $.00005"$  ( $0.001\text{mm}$ )
- Rechargeable battery
- Embedded radio allows to send data up to 30' with no end nodes or cables



## W769.1 ELECTRONIC TUBE MICROMETER

0-1"

Starrett innovation brings a truly wireless micrometer. Keeping with the same features as the 769.1 electronic micrometers, these are now equipped to send data with the push of a button.

### W769.1 Electronic Tube Micrometer with Inch Grads

Cat. No.	EDP	Range
W769.1AXFL-1	60598	0-1"



### FEATURES AND SPECIFICATIONS

- Large easy to read high contrast LCD digital readout
- Starrett no-glare satin chrome finish on thimble and sleeve
- Balanced and tapered frame
- Extremely hard one-piece spindle-the heart of our accuracy!
- Micro-lapped carbide measuring surfaces
- Auto Off after 20 minutes of nonuse
- Inch/millimeter conversion
- Measurement HOLD button
- Zero at any position
- Retain and return to true zero reading
- Accuracy  $\pm .0001"$  ( $\pm 0.002\text{mm}$ )
- Resolution  $.00005"$  ( $0.001\text{mm}$ )
- Rechargeable battery
- Embedded radio allows to send data up to 30' with no end nodes or cables



# ELECTRONIC MICROMETERS

## W786.1 ELECTRONIC BLADE MICROMETER (NON-ROTATING)

0-5"

Starrett innovation brings a truly wireless micrometer. Keeping with the same features as the 786.1 electronic micrometers, these are now equipped to send data with the push of a button.

W786.1 Electronic Blade Micrometer with Inch Grads		
Cat. No.	EDP	Range
W786.1P-1	60600	0-1"
W786.1P-2	60601	1-2"
W786.1P-3	62332	2-3"
W786.1P-4	62338	3-4"
W786.1P-5	60602	4-5"

Carbide face measuring surface available upon request



W786.1P-1

### FEATURES AND SPECIFICATIONS

- Large easy to read high contrast LCD digital readout
- Starrett no-glare satin chrome finish on thimble and sleeve
- Balanced and tapered frame
- Extremely hard one-piece spindle- the heart of our accuracy!
- .030 blade thickness
- Will measure to 5/16" depth
- Auto Off after 20 minutes of nonuse
- Inch/millimeter conversion
- Measurement HOLD button
- Zero at any position
- Retain and return to true zero reading
- Accuracy  $\pm .0001"$  ( $\pm 0.002\text{mm}$ )
- Resolution  $.00005"$  ( $0.001\text{mm}$ )
- Rechargeable battery
- Embedded radio allows to send data up to 30' with no end nodes or cables



## W756.1FL ELECTRONIC DISC TYPE MICROMETER

0-2"

Starrett innovation brings a truly wireless micrometer. Keeping with the same features as the 756.1 electronic micrometers, these are now equipped to send data with the push of a button. IP67 rating to help protect against coolant, water, chips, dirt and dust.

W756.1 Electronic Disc Type Micrometer with Inch Grads		
Cat. No.	EDP	Range
W756.1FL-1	60592	0-1"
W756.1FL-2	62339	1-2"



### FEATURES AND SPECIFICATIONS

- Large easy to read high contrast LCD digital readout
- Starrett no-glare satin chrome finish on thimble and sleeve
- Balanced and tapered frame
- Extremely hard one-piece spindle- the heart of our accuracy!
- Auto Off after 20 minutes of nonuse
- Inch/millimeter conversion
- Measurement HOLD button
- Zero at any position
- Retain and return to true zero reading
- Accuracy  $\pm .0001"$  ( $\pm 0.002\text{mm}$ )
- Resolution  $.00005"$  ( $0.001\text{mm}$ )
- Rechargeable battery
- Embedded radio allows to send data up to 30' with no end nodes or cables
- IP67 rating
- Anvil + discs are 1/2" diameter tapering to .015" edge thickness



# ELECTRONIC MICROMETERS

## W788.1 ELECTRONIC ROUNDED ANVIL MICROMETER

0-1"

Starrett innovation brings a truly wireless micrometer. Keeping with the same features as the 788.1 electronic micrometers, these are now equipped to send data with the push of a button. IP67 rating to help protect against coolant, water, chips, dirt and dust.

W788.1 Electronic Rounded Anvil Micrometer with Inch Grads

Cat. No.	EDP	Range
W788.1XFL	60603	0-1"



## FEATURES AND SPECIFICATIONS

- Large easy to read high contrast LCD digital readout
- Starrett no-glare satin chrome finish on thimble and sleeve
- Balanced and tapered frame
- Extremely hard one-piece spindle- the heart of our accuracy!
- Micro-lapped carbide measuring surfaces
- Auto Off after 20 minutes of nonuse
- Inch/millimeter conversion
- Measurement HOLD button
- Zero at any position
- Retain and return to true zero reading
- Accuracy  $\pm 0.0001"$  ( $\pm 0.002\text{mm}$ )
- Resolution  $.00005"$  ( $0.001\text{mm}$ )
- Rechargeable battery
- Embedded radio allows to send data up to 30' with no end nodes or cables
- IP67 rating



## W760.1 ELECTRONIC SCREW THREAD MICROMETER

0-1"

Starrett innovation brings a truly wireless micrometer. Keeping with the same features as the 760.1 electronic micrometers, these are now equipped to send data with the push of a button. IP67 rating to help protect against coolant, water, chips, dirt and dust.

W760.1 Electronic Screw Thread Comparator Micrometer with Inch Grad

Cat. No.	EDP	Range
W760.1FL	60593	0-1"



## FEATURES AND SPECIFICATIONS

- Large easy to read high contrast LCD digital readout
- Starrett no-glare satin chrome finish on thimble and sleeve
- Balanced and tapered frame
- Extremely hard one-piece spindle- the heart of our accuracy!
- Auto Off after 20 minutes of nonuse
- Inch/millimeter conversion
- Measurement HOLD button
- Zero at any position
- Retain and return to true zero reading
- Accuracy  $\pm 0.0001"$  ( $\pm 0.002\text{mm}$ )
- Resolution  $.00005"$  ( $0.001\text{mm}$ )
- Rechargeable battery
- Embedded radio allows to send data up to 30' with no end nodes or cables
- IP67 rating



# ELECTRONIC MICROMETERS

## W762.1 ELECTRONIC MICROMETER HEAD

0-2"/0-25MM

Starrett innovation brings a truly wireless micrometer head. Keeping with the same features as the 762.1 electronic micrometer heads, these are now equipped to send data with the push of a button.

W762.1 Electronic Micrometer Head with Inch Grads		
Cat. No.	EDP	Range
W762.1XFL	60595	0-1"
W762.1XFL-2	60596	0-2"
W762.1M Electronic Micrometer Head with Metric Grads		
Cat. No.	EDP	Description
W762.1MEXFL-25	60594	0-25mm



W762.1XFL

### FEATURES AND SPECIFICATIONS

- Large easy to read high contrast LCD digital readout
- Starrett no-glare satin chrome finish on thimble and sleeve
- Balanced and tapered frame
- Extremely hard one-piece spindle-the heart of our accuracy!
- Micro-lapped carbide measuring surface
- Auto Off after 20 minutes of nonuse
- Inch/millimeter conversion
- Measurement HOLD button
- Zero at any position
- Retain and return to true zero reading
- Accuracy  $\pm .0001"$  ( $\pm 0.002\text{mm}$ )
- Resolution  $.00005"$  ( $0.001\text{mm}$ )
- Rechargeable battery
- Embedded radio allows to send data up to 30' with no end nodes or cables



## W777.1 ELECTRONIC BENCH MICROMETER

0-1"

Starrett innovation brings a truly wireless bench micrometer. Keeping with the same features as the 777.1 electronic bench micrometer, these are now equipped to send data with the push of a button.

W777.1 Electronic Bench Micrometer with Inch Grads		
Cat. No.	EDP	Range
W777.1XFLZ	60599	0-1"



### FEATURES AND SPECIFICATIONS

- Large easy to read high contrast LCD digital readout
- Starrett no-glare satin chrome finish on thimble and sleeve
- Balanced and tapered frame
- Extremely hard one-piece spindle-the heart of our accuracy!
- Micro-lapped carbide measuring surfaces
- Auto Off after 20 minutes of nonuse
- Inch/millimeter conversion
- Measurement HOLD button
- Zero at any position
- Retain and return to true zero reading
- Accuracy  $\pm .0001"$  ( $\pm 0.002\text{mm}$ )
- Resolution  $.00005"$  ( $0.001\text{mm}$ )
- Rechargeable battery
- Embedded radio allows to send data up to 30' with no end nodes or cables



# ELECTRONIC DEPTH GAGE

## W749.1 ELECTRONIC MICROMETER DEPTH GAGE

0-12"

Starrett innovation brings a truly wireless micrometer depth gage. Keeping with the same features as the 749.1 electronic micrometer depth gage, these are now equipped to send data with the push of a button.

### W749.1 Electronic Bench Micrometer with Inch Grads

Cat. No.	EDP	Range
W749.1BZ-6RL	60591	0-6"
W749.1BZ-12RL	62340	0-12"

### Rods only for the W749.1 Wireless Electronic Micrometer Depth Gages

Cat. No.	EDP	Range
Pt99601	72765	0-1"
Pt99602	72870	1-2"
Pt99603	72871	2-3"
Pt99604	72872	3-4"
Pt99605	72873	4-5"
Pt99606	72874	5-6"
Pt99607	72875	6-7"
Pt99608	72876	7-8"
Pt99609	72877	8-9"
Pt99610	72878	9-10"
Pt99611	72879	10-11"
Pt99612	72880	11-12"

## W643JZ ELECTRONIC DEPTH GAGE

0-.125"

This gage is now available with a W2900-5-1 Wireless Indicator for a digital readout and wireless data collecting option. This gage has a knife edge base and a needle point contact which has been hardened and ground. The knife edge base has a cutout so the conical point can be precisely positioned for close work. Point is 1/2" long with a 40 degree angle.

In action, the inspector gently pushes against a surface plate or other calibrated surface.

### W643JZ Electronic Depth Gage

Cat. No.	EDP	Range	Resolution	Accuracy
W643JZ	62332	0-.125" / 3mm	0.0005" / 0.01mm	+/- .001" / 0.03mm

### FEATURES AND SPECIFICATIONS

- Intuitive design and layout-easy to learn and use
- Positive tactile-free button activation
- Origin set, Zero set
- Auto off after 20 minutes on nonuse
- Inch/millimeter conversation
- Rechargeable battery port
- Embedded radio allows to send data up to 30' with no end nodes or cables

### FEATURES AND SPECIFICATIONS

- Large easy to read high contrast LCD digital readout
- Starrett no-glare satin chrome finish on thimble and sleeve
- Balanced and tapered frame
- Extremely hard one-piece spindle-the heart of our accuracy!
- Base length 4" (100mm)/Rod diameter 5/32" (4mm)
- Auto Off after 20 minutes of nonuse
- Inch/millimeter conversion
- Measurement HOLD button
- Zero at any position
- Retain and return to true zero reading
- Accuracy +/- .0001" (+/- 0.002mm)
- Resolution .00005" (0.001mm)
- Rechargeable battery
- Embedded radio allows to send data up to 30' with no end nodes or cables



# ELECTRONIC DEPTH GAGE

## W644JZ ELECTRONIC DEPTH GAGE

0-.500"/0-13MM

This gage is now available with a W2900-5-1 Wireless Indicator for a digital readout and wireless data collecting option. These gages are direct reading tools, referencing from their harden and ground bases. All bases are 2-1/2" long. They are quicker and more convenient to use than any other type of depth gage within their ranges and accuracy.

In action, the inspector gently pushes against a surface plate or other calibrated surface.

### FEATURES AND SPECIFICATIONS

- Intuitive design and layout-easy to learn and use
- Positive tactile-free button activation
- Origin set, Zero set
- Auto off after 20 minutes on nonuse
- Inch/millimeter conversation
- Rechargeable battery port
- Embedded radio allows to send data up to 30' with no end nodes or cables

W640 Electronic Depth Gage				
Cat. No.	EDP	Range	Resolution	Accuracy
W640JZ	62333	0-.500" / 0-13mm	.0005" / 0.01mm	+/- .001" / 0.03mm

## W640JZ ELECTRONIC DEPTH GAGE

0-3"

This gage is now available with a W2900-5-1 Wireless Indicator for a digital readout and wireless data collecting option. Used for long range applications, they are accurate and simple to use. Put the contact on the work to be measured and push the gage head down until the base stops at the reference point and take your reading.

Furnished with three rounded-end-contact points to cover the range. Flat end contact points are also available on special order.

The zero setting can be checked with the shortest contact in place by pushing on a flat surface.

W644JZ Electronic Depth Gage				
Cat. No.	EDP	Range	Resolution	Accuracy
W644JZ	62331	0-3" / 0-75mm	0.0005" / 0.01mm	+/- .001" / 0.03mm

### FEATURES AND SPECIFICATIONS

- Intuitive design and layout-easy to learn and use
- Positive tactile-free button activation
- Origin set, Zero set
- Auto off after 20 minutes on nonuse
- Inch/millimeter conversation
- Rechargeable battery port
- Embedded radio allows to send data up to 30' with no end nodes or cables



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