





# SPRING PROMO 2024 PRECISION TOOLS & INSTRUMENTS

Effective March 15, 2024 through June 28, 2024



**Bulletin No. 2347** 

SPRING PROMO 2024





#### **Dear Valued Customers**.

I want to take a moment to express my sincere appreciation for your continued support and commitment to Mitutoyo products and services. The 2024 spring promotion features many great Mitutoyo precision measurement instruments such as the very popular, redesigned LH600F/FG Linear Height Gage, new IDC/IDF indicators, the SJ-210 surface roughness testers, profile projectors and several different types of linear gages. The promotion also features many other trusted Mitutoyo tools and instruments including data management solutions, calipers, micrometers, linear encoders, test indicators, height gages, microscopes, hardness testers, and contact sensors such as linear gages and the motorized Litematic contact gage. Prices are effective March 15, 2024 through June 28, 2024.

You can find all of the latest promotions, products and events on our website, www.mitutoyo.com, as well as on my.mitutoyo.com. Thank you for trusting Mitutoyo with your metrology needs.

Sincerely,

Matt Dve President, Mitutoyo America Corporation

Matthew B. syc



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Highly versatile surface roughness instruments available in portable. manual and CNC models full of features and capabilities. Mitutoyo surface roughness testers deliver precise and accurate measurements.

- These new Digimatic Indicators have higher resolutions down to 20µinch/0.5 µm, a built-in calibration date warning and analog bar on the larger LCD display, and new S1 Digimatic output capabilities.
- Mitutoyo digital and dial indicators deliver excellent readability even in adverse environments. Our indicators are ideal for use in peak value and bore gage applications, performing calculations, and detecting minute changes in displacement.

**NEW** Profile Projectors ...... 12 Mitutoyo profile projectors provide some of the most accurate and clear images in the market. Easily capture accurate measurements without blurring, distortion or complex calculations with their day-bright surface illuminations.

LH-600F/FG Linear Height Gages ...... 14 The Mitutoyo LH-600F Linear Height Measurement System is the latest model in the Mitutoyo Linear Height Gage line with several new features like an adjustable, rotatable display, intuitive touchscreen interface, and added output options for even easier, highly accurate 2D dimensional measurements.

Mitutoyo linear gages deliver durable, reliable measurements for countless applications. The Litematic offers ultra-high precision measurement with extra-low measuring force to measure easily deformed workpieces.

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# Surftest

### Surftest SJ-210 Packages

**MeasurLink**<sup>®</sup> ENABLED

- >2.4-inch color LCD display with backlighting is switchable to vertical or horizontal left / right-hand views
- > The built-in battery allows approximately 1,000 measurements on a full charge (4 hours charging time)
- > Performs roughness analysis conforming to international standards JIS '82 / JIS '94 / JIS '01 / ISO '97 /ANSI/VDA
- > Optional MicroSD card can store up to 500 measurement conditions, 10000 measurement results and 500 image data
- > Function restriction feature locks conditions to prevent erroneous measurements if settings are accidentally changed.

Order No.	Spring Promo Price	List
178-561-12A-SPP	SJ-210 4MN (STANDARD DRIVE UNIT) INCH/MM	\$2,820.00
STF-210	eLearning Course	\$30.00

Order No	Calibration Package	List
178-561-12A-CP	SJ-210 4MN (STANDARD DRIVE UNIT) INCH/MM	\$3,409.00
178-390	FREE EXTRA DETECTOR	\$522.00
C178-602	Calibration Specimen fee	\$67.15
STF-210	eLearning Course	\$30.00

Order No	Data Collection Package	List
178-561-12A-DC	SJ-210 4MN (STANDARD DRIVE UNIT) INCH/MM	\$3,770.00
02AZD730G	U-WAVE TRANSMITTER	\$253.00
02AZD790D	U-WAVE connecting cable D	\$126.00
02AZD810D	U-WAVE RECEIVER	\$571.00
STF-210	eLearning Course	\$30.00

Order No	Height Gage Package	List	Promo
178-561-12A-HG	SJ-210 4MN (STANDARD DRIVE UNIT) INCH/MM	\$4,088.00	\$3,500.00
570-413	Digimatic Height Gage (HDSH18" CX)	\$1,150.00	Included
12AAA233	Height Gage Adapter (INCH)	\$118.00	Included
STF-210	eLearning Course	\$30.00	Included

Order No	Manual Column Stand Package	List
178-561-12A-MCS	SJ-210 4MN (STANDARD DRIVE UNIT) INCH/MM	\$3,834.00
178-069	Column Stand for SJ-210/310/410	\$962.00
12AAA220	Magnetic Stand Adaptor (3/8" DIA)	\$51.85
STF-210	eLearning Course	\$30.00

# Up to 25% OFF on SJ-210 Packages Mitutoyo

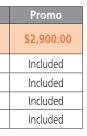








Promo
\$2,650.00
Included
Included
Included



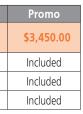








Wireless Communication System













# Indicators

# **Dial Test Indicators**

## **IDC/IDF Digimatic Indicators**

High-performance ABS Digimatic Indicators

- >20 µinch/0.5 µm resolution. The ID-C and ID-F ranges now include models with 0.0005 mm resolution. The units are also capable of resolution switching. \*Except for the ID-C 0.01 mm resolution model.
- > Large screen and analog bar. The units have large screens that can display various information in an easy-to-read manner. They also have an analog bar, convenient for observing subtle movements such as the approach to tolerance.
- >New Digimatic S1 Output. S1 is Mitutoyo's new, bidirectional output format that enables writing information to the gages such as calibration date warnings, operator info, and the ability to poll the serial number (wired or wirelessly) for easier gage management.
- > Calibration period notification function. The LCD displays an icon to notify the user when the set calibration time approaches. This facilitates the proper precision management of ID-C/ID-F.



> Simple Calculation Function. The result of the spindle movement value multiplied by the calculation coefficient can be displayed in real time. This reduces the work of measuring with a jig or similar tool.

> f(x) = Ax f(x): Displayed value x: Spindle movement value A: Selected value

#### ID-C Sories - Battery Operated

ID-C Series - Battery Operated												
Order No.				Maximum Permissible Error			Measuring		Net mass (g)			
With Lug	Flat Back	Range	Resolution	MPE <sub>E</sub>	Hysteresis MPE <sub>H</sub>	Repeatability MPE <sub>R</sub>	for MPL (N)	Interface	With Lug	Flat Back	List	Promo
543-702	543-702B	0.5" / 12.7mm	0.00002" / .00005" / 0.0001" / 0.0005" 0.0005mm / 0.001mm / 0.01mm				1.5 or less	d1/d2/S1	195	165	\$501.00	\$450.90
543-707	543-707B	0.5" / 12.7mm		± 0.00012" / 0.002mm	0.00008" / 0.002mm	0.00008" / 0.002mm	0.4 to 0.7	d1/d2/S1	190	160	\$783.00	\$704.70
-	543-722B	1" / 25.4mm		0.00211111			1.8 or less	d1/d2/S1	-	195	\$645.00	\$580.50
-	543-732B	2" / 50.8mm		± 0.0002" / 0.005mm			2.3 or less	d1/d2/S1	-	260	\$840.00	\$756.00
543-712	543-712B	0.5" / 12.7mm					0.9 or less	d1/S1	190	160	\$366.00	\$329.40
543-717	543-717B	0.5" / 12.7mm	0.0005" / 0.01mm	± 0.001" / 0.02mm	0.001" /	0.0005" /	0.2 to 0.5	d1/S1	185	155	\$587.00	\$528.30
-	543-727B	1" / 25.4mm		0.0211111	0.001 7 0.02mm	0.0005 / 0.01mm	1.8 or less	d1/S1	-	190	\$537.00	\$483.30
-	543-737B	2" / 50.8mm		± 0.0015" / 0.04mm			2.3 or less	d1/S1	-	245	\$704.00	\$633.60

#### **ID-F Series - AC Powered**

Order No.	Range		Maximum Pe	Measuring		Net				
		Resolution	MPE <sub>E</sub>	Hysteresis MPE <sub>H</sub>	Repeatability MPE <sub>ℝ</sub>	Measuring for MPL (N)	Interface	mass (g)	List	Promo
543-852A	1" / 25.4mm	0.005mm / 0.001mm / 0.01 mm	± 0.0001" / 0.0025mm			1.8 or less	d1/d2/S1	240	\$787.00	\$708.30
543-854A	2" / 50.8mm	0.00002" / .00005" / 0.0001" /	± 0.00016" / 0.004mm	0.00008" / 0.002mm	0.00008" / 0.002mm	2.3 or less	d1/d2/S1	330	\$894.00	\$804.60
<b>543-858A</b>	2 / 50.8000	0.0005"/ 0.001" (selectable)	± 0.00012" / 0.003mm	0.00211111		2.3 or less	d1/d2/S1	330	\$912.00	\$820.80

Prices effective March 15, 2024 through June 28, 2024



Improved work efficiency thanks to excellent readability

#### Large screen and analog bar

The units have large screens that can display various information in an easy-to-read manner. They also have an analog bar, convenient for observing subtle movements such as the approach to tolerance.



# **Dial Test Indicators**



.000050" / 50µinch model now available!

>One-piece movement assembly for improved durability & impact resistance. > Contact point length shown on dial face. >Certificate of Inspection included. > Shows results from both measuring directions. > Resilient crystal with high resistance to glare, scratches and impact.

Part #	Range	Graduations	Set Type	Face Color	
Standa	ard				
513-407-10E	.008″	.00005″	Basic	White	\$2
513-407-10T	.008″	.00005″	Full	White	\$2
513-401-10E	.14mm	0.001mm	Basic	Yellow	\$2
513-402-10E	.03"	.0005"	Basic	White	\$1
513-402-10T	.03"	.0005"	Full	White	\$1
513-403-10E	.008"	.0001 "	Basic	White	\$1
513-403-10T	.008"	.0001 "	Full	White	\$2
513-404-10E	0.8mm	0.01mm	Basic	Yellow	\$1
513-404-10A	0.8mm	0.01mm	Plus	Yellow	\$'
513-404-10T	0.8mm	0.01mm	Full	Yellow	\$
513-405-10E	0.2mm	0.002mm	Basic	Yellow	\$
513-405-10T	0.2mm	0.002mm	Full	Yellow	\$2
513-406-10E	.03″/0.7mm	.0005"/0.01mm	Basic	White/Yellow	\$
13-406-10T	.03″/0.7mm	.0005″/0.01mm	Full	White/Yellow	\$
513-409-10E	0.2mm/.0076"	0.002mm/.0001"	Basic	Yellow/White	\$2
513-409-10T	0.2mm/.0076"	0.002mm/.0001"	Full	Yellow/White	\$2
513-412-10E	.03"	.0005"	Basic	White	\$2
513-412-10T	.03"	.0005"	Full	White	\$2
513-415-10E	1.0mm	0.01mm	Basic	Yellow	\$1
513-415-10H	1.0mm	0.01mm	Basic	Yellow	\$
Ruby Tip		1	<u> </u>	L	
513-472-10E	.03"	.0005"	Basic	White	\$1
513-479-10E	.03"	.0005"	Basic	White	\$1
🥟 Standa	ard (20° tilted f	face)			
513-442-10A	.06"	.0005"	Basic	White	\$2
513-442-10T	.06"	.0005"	Full	White	\$2
513-442-16A	.06″	.0005″	Basic	Black	\$2
513-442-16T	.06″	.0005″	Full	Black	\$2
513-446-16A	.06"	.0005"	Basic	Black	\$2
513-446-16T	.06"	.0005"	Full	Black	\$3
513-446-10A	.06″	.0005″	Basic	White	\$2
513-446-10T	.06″	.0005″	Full	White	\$3
513-443-10A	.016″	.0001″	Basic	White	\$2
513-443-10T	.016″	.0001″	Full	White	\$2
Vertical:	dial is on the	top of the frame	1		
513-452-10E	.03"	.0005"	Basic	White	\$
513-452-10T	.03"	.0005"	Full	White	\$2
513-453-10E	.008″	.0001″	Basic	White	\$2
Parallel:		side of the frame			
513-485-10E	0.2mm	0.002mm	Basic	Yellow	\$2

## Mitutoyo

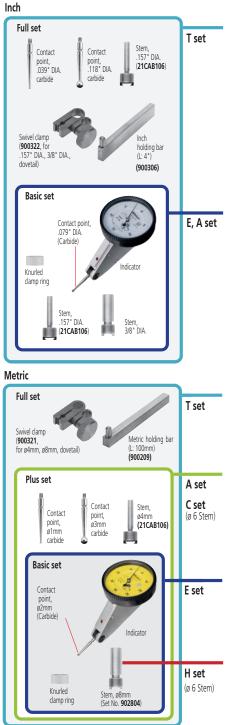
10% OFF



Contact point length is printed on dial face to avoid accuracy issues

	-	
List	Promo	Remarks
20.00	\$198.00	Fine grads
58.00	\$232.20	Fine grads
62.00	\$235.80	
53.00	\$137.70	
82.00	\$163.80	
99.00	\$179.10	
34.00	\$210.60	
55.00	\$139.50	
71.00	\$153.90	
83.00	\$164.70	
73.00	\$155.70	
26.00	\$203.40	
80.00	\$162.00	Dual dial
99.00	\$179.10	Dual dial
32.00	\$208.80	Dual dial
35.00	\$211.50	Dual dial
20.00	\$198.00	
54.00	\$228.60	
65.00	\$148.50	Long stylus
81.00	\$162.90	Long stylus
71.00	\$153.90	
81.00	\$162.90	Long stylus
08.00	\$187.20	
35.00	\$211.50	
08.00	\$187.20	
35.00	\$211.50	
78.00	\$250.20	Long stylus
13.00	\$281.70	Long stylus
78.00	\$250.20	Long stylus
13.00	\$281.70	Long stylus
62.00	\$235.80	
96.00	\$266.40	
99.00	\$179.10	
20.00	\$198.00	
37.00	\$213.30	
		1
54.00	\$228.60	

#### **Set Configuration**



# Indicators

2.00000

300000

543-342B

10%

OFF

# Indicators

Remote Pr > This digital accuracy ar this class or high accura resolution, handheld c and easy ru established	<ul> <li>Digimatic Indicator ID-H Remote Programming Capable</li> <li>This digital indicator offers the excellent accuracy and functionality expected from this class of indicator. Take advantage of its high accuracy backed up by 0.5µm / .0002" resolution, remote control functionality via a handheld controller (or an RS-232C interface) and easy runout measurements with the well- established analog bar display.</li> <li>The maximum, minimum or runout value can be displayed during measurement.</li> <li>GO/NO-GO judgment is performed by setting the upper and lower tolerances. If a judgment result is out of tolerance, the display backlighting changes from green to red, so tolerance judgment can be made at a glance.</li> <li>With RS-232C input/output</li> </ul>										3-564A
Order No.	Resolution	F	Range	Model	Accuracy	List	Promo			T	
543-562A	.00002", .00005", .00	01" 1.2"	/ 30.4mm  [	D-H530E	0.0015mm	\$1,040.00	\$936.00				
543-564A	0.0005 mm, 0.001mi		/ 60.9mm  [	D-H560E	0.0025mm	\$1,240.00	\$1,116.0		urLink <sup>®</sup> ENABLED gement Software by Mitutoyo		
						SPC cable – 1m:		Batamana		, III	
	ITE Digimatic							4.00			
life; the ori > Ideal for in > Employing from the or	nitial origin setting, th gin is remembered ev stallation into measur the ABSOLUTE linear rigin at power-on. Als ype has no option for	en after po ring devices encoder, t o unlimited	ower-off. s because of o he ID-U alway	compact ys display	design and s the spind	long battery le Absolute P	life.		575-123	SPC ABSOLUTE®	
Order No.	Resolution	Range	Model	Accurac	y Measu	ring force	List	Promo		<b>NeasurLink<sup>®</sup> EN</b> Pata Management Software by	
575-123	.0005"/0.01mm 1"	/ 25.4mm	ID-U1025E	.0008″	1.8N	or less	\$230.00	\$207.00			
						SPC c	able – 1m: <b>9053</b> :	38 2m: 905409			
ABSOLUTE Digimatic Indicator ID-S > Employing the ABSOLUTE linear encoder, the ID-S always displays the spindle Absolute Position from the origin at power-on. Also, unlimited response speed eliminates overspeed errors. > Dust/water protection level: IP42 (IP53: 543-796B-10). > SPC data output											
Order No.	Resolution		Range	Ac	curacy	Measuring fo	orce F	lemarks	List	Promo	
Stem dia. 3/	8", #4-48 UNF Thread	d k									
543-792-10	.00005″/0.001เ	mm	.5″ / 12.7mm	±.	0001″	1.5N or less	W	/ lug back	\$322.00	\$289.80	

<ul> <li>This digital accuracy at this class o high accura resolution, handheld c and easy ru</li> </ul>	tic Indicator I rogramming Capa indicator offers the e nd functionality expect f indicator. Take adva acy backed up by 0.5 remote control funct controller (or an RS-23 unout measurements a analog bar display.	able excellent cted from ntage of its µm / .00002 " ionality via a 32C interface)	be display > GO/NO-G setting th judgment backlighti tolerance	red during me iO judgment i e upper and l result is out o ng changes fi	s performed b ower tolerance of tolerance, t om green to r o be made at a	y es. If a he display ed, so	10% OFF	21EZA099 Remote contr (optional)	oller
Order No.	Resolution	Range	Model	Accuracy	List	Promo	CD/		
543-562A		1 2" / 20 4m				\$936.00			
543-564A	.00002", .00005", .00 0.0005mm, 0.001mi	UI ,			-	\$1,116.00			
		2.1 7 00.51				<b>36937</b> 2m: <b>965014</b>	-	ment Software by Mituto	yo
	JTE Digimatic					50557 2111. 505014	10%		
<ul> <li>Large LCD</li> <li>After the in life; the ori</li> <li>Ideal for in</li> <li>Employing from the o</li> <li>Flat-back t</li> </ul>	I indicator with low p and simple key opera nitial origin setting, th gin is remembered ev stallation into measur the ABSOLUTE linear rigin at power-on. Als ype has no option for	ation. The ID-U no longer and after power-corring devices beca encoder, the ID- so unlimited respo- backs.	ff. use of compac J always displ onse speed eli	ct design and ays the spind minates overs	long battery l le Absolute Pc peed errors.	ife. isition		575-123	SPC ABSOLUTE°
Order No.	Resolution	Range Mo	odel Accur	acy Measu	ing force	List Pr	omo		Data Management Software by Mitutoyo
575-123	.0005"/0.01mm 1"	/ 25.4mm ID-U	1025E .000	8″ 1.8N	or less \$	230.00 <b>\$2</b>	07.00		
<ul> <li>Employing Position fro overspeed</li> </ul>	r protection level: IP42	encoder, the ID- er-on. Also, unlim	S always displaited response		e Absolute	<b>10%</b> <b>OFF</b>			SPC ABSOLUTE <sup>®</sup> MeasurLink <sup>®</sup> ENABLED Data Management Software by Mitutoyo
Order No.	Resolutior	<u>Rai</u>	nge /	Accuracy	Measuring fo	rce <u>Rem</u>	arks	List	Promo
	'8", #4-48 UNF Threa								
543-792-10	.00005"/0.001	mm 5″/1	2.7mm	±.0001″	1.5N or less	w/ luc	1 back	\$322.00	\$289.80

2.5N or less

1.5N or less

1.5N or less

1.5N or less

2.5N or less

1.5N or less

1.5N or less

Order No.	Resolution	Range	Accuracy			
Stem dia. 3/8", #4-48 UNF Thread						
543-792-10	.00005″/0.001mm	.5″ / 12.7mm	±.0001"			
543-796-10	.00005″/0.001mm	.5″ / 12.7mm	±.0001"			
543-793-10	.0001″/0.001mm	.5″ / 12.7mm	±.0001"			
543-783-10	.0005″/0.01mm	.5″ / 12.7mm	±.0010"			
543-792B-10	.00005″/0.001mm	.5″ / 12.7mm	±.0001"			
543-796B-10	.00005″/0.001mm	.5″ / 12.7mm	±.0001"			
543-793B-10	.00005″/0.001mm	.5″ / 12.7mm	±.0001"			
543-783B-10 .0005"/0.01mm		.5″ / 12.7mm	±.0010"			

## **Calculation-Type Digimatic Indicator ID-C**

- > Calculation-Type Digimatic Indicator features both a key lock and parameter lock.
- > Fast measurement frequency up to 50 per second.
- > An analog bar provides easy-to-read values when scanning for Max, Min and TIR Values.
- > Improved parameter setting software makes it even easier to set all of the available parameters and determine and upload the proper coefficients for calculation. (optional) 21EZA313
- > The ABSOLUTE Digimatic indicator performs internal calculations using the formula Ax+B+Cx-1 (assuming spindle displacement as x), while the specified

Order No.	Resolution	Range	Accuracy	Measuring Force	List	Promo
543-342B-10	.00005/.0001/.0005" (0.001/0.01mm) Selectable	.5"/12.7mm	±.00010"/0.003mm	1.5N or less	\$524.00	\$471.60

Stem dia 3/8" #4-48 UNF Thread

## **Bore Gage ABSOLUTE Digimatic Indicator ID-C**

- > Hold automatically picks up hole diameter after a sweep.
- > Bore Gage Digimatic Indicator features both a key lock and parameter lock.
- > Fast measurement frequency up to 50 per second.
- > An analog bar indicator is integrated to enhance the intuition in reading.
- > Up to three sets of master values and upper/lower tolerance values can be memorized.
- >GO/NO-GO judgment

coefficients A, B and C can be set with respect to the

This unique feature allows for reading measurements

directly, without searching for conversions.

purpose of measurement or dimensions of the fixtures.

> Employing the ABSOLUTE linear encoder, the ID-C always displays the spindle Absolute Position from the origin at power-on.

SPC cable - 1m: 905338 2m: 905409

SPC

**ABSOLUTE**°

MeasurLink<sup>®</sup> ENABLED

> Improved para easier to set a determine and calculation. (o

Installed on Order No. Resolution Range optional bore gage probe (page 9) .00005/.0001/.0005" 543-312B-10 5"/12.7mm ±.00010"/0.003mm (0.001/0.01mm) Selectable

## **Peak Hold ABSOLUTE Digimatic Indicator ID-C**

- With Max./Min. Value Holding Function
- > Peak Hold Digimatic Indicator features both a Key Lock and Parameter Lock.
- > An analog bar provides easy-to-read values when scanning for Max, Min and TIR Values.
- >GO/NO-GO judgment
- > The maximum, minimum or runout value can be displayed during measurement.
- > Fast measurement frequency up to 50 per second. > Employing the ABSOLUTE linear encoder, the Signal ID-C
- always displays the spindle Absolute Position from the origin at power-on.
- > Improved parameter setting software makes it even easier to set all of the available parameters and then determine and upload the proper coefficients for calculation. (optional) 21EZA313

Order No.	Resolution	Range	Accuracy	Remarks	List	Promo	SPC 1	543-302B
Stem dia. 3/8",	, #4-48 UNF Thread							
543-302-10	.00005/.0001/.0005" 0.001/0.01mm	.5"/12.7mm	±.00010"/0.003mm	w/lug	\$524.00	\$445.40		
543-302B-10	Selectable	.5"/12.7mm	±.00010"/0.003mm	Flat-back	\$524.00	\$445.40	<b>MeasurLink</b> <sup>®</sup> ENABLED	
					SPC cable – 1m: 9	05338 2m: 905409	Data Management Software by Mitutovo	

Prices effective March 15, 2024 through June 28, 2024

- SPC cable 1m: 905338 2m: 905409 15% OFF 0.0 1490

ients for	
	543-312B
ABLED y Mitutoyo	
romo	SPC <sup>®</sup>

10% OFF

ameter setting software makes it even all of the available parameters and d upload the proper coefficients for optional) 21EZA313 MeasurLink ENABLED Data Management Software by Mitutoyo							
Measuring Force	List	Promo	SPC <sup>**</sup>				
1.5N or less	\$524.00	\$471.60	<b>ABSOLUTE</b> °				

# Mitutoyo

www.m	itutoyo.com
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\$320.40

\$289.80

\$188.10

\$289.80

\$320.40

\$289.80

\$188.10

\$356.00

\$322.00

\$209.00

\$322.00

\$356.00

\$322.00

\$209.00

w/ lug-back

w/ lug back

w/ lug-back

w/ flat back w/ flat-back

w/ flat back

w/ flat-back

# **Dial Indicators / Bore Gages**

### **Series Two Dial Indicators**

- > Improved Impact- and oil-resistant materials are employed in the bezel. Easier reading is due to the improved shape of the crystal face.
- > High-strength, heat-treated stainless steel spindles for longevity
- > Scratch and chemical-resistant hard-coated crystals
- > Increased rigidity in the bearing plate for reducing the retracing error (20%) and 4-screw mounting for greater impact resistance
- >Inspection certificate included
- >No through screw-holes on the frame for high oil- and dust-resistance. The bezel clamp (optional) can be attached either to the right or left side.



Revolutionary stem-bush desig for trouble-free stem clamping (longer clamping range; maxiumum tightening torque at the clamping point with M5 screw: 150N•cm).



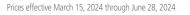
Order No.	Graduation	Range	Range/Rev	Туре	Dial Reading	Accuracy First 2.5 Rev/ Overall	Force	List	Promo
2358A-10*	.0001″	.5″	.01"	w/lug	0-10	.0001 / .0008	2.0N or less	\$227.00	\$215.65
2803A-10*	.0001″	.025″	.01"	w/lug	0-5-0	.0001 / .0001	2.5N or less	\$189.00	\$179.55
2416A-10*	.001″	1″	.1"	w/lug	0-100	.001 / .002	1.8N or less	\$166.00	\$157.70
2424A-19*	.001″	2″	1"	w/lug	0-100	.001 / .003	2.5N or less	\$286.00	\$271.70
2776A	.0005″	1″	.05"	w/lug	0-50	.0005 / .002	2.5N or less	\$167.00	\$158.65

\*Jeweled bearing model

### **Bore Gages**

- > Carbide-tipped contact points for durability.
- > The dial indicator is fully protected by a rugged cover.
- > Optional extension rods can be attached for measuring deep holes. >The grip minimizes the variation of measurements by reducing heat
- transfer from the operator's hand

Order No.	Range	Graduation	Anvils	Spacers	List	Promo		
With Indicator								
511-751-20	.7 - 1.4″		9	2	\$486.00	\$437.40		
511-752-20	1.4 - 2.5″		6	4	\$473.00	\$425.70		
511-753-20	2.0 - 6.0"	.0001″	11 (2" sub anvil)	4	\$517.00	\$465.30		
511-754-20	4.0 - 6.5″	(2923B-10)	13	4	\$683.00	\$614.70		
511-755-20	6.5 - 10″		6	7	\$771.00	\$693.90		
511-756-20	10 - 16″		5 (3" sub anvil)	7	\$915.00	\$823.50		
Without Indi	cator							
511-731	.7 - 1.4″		9	2	\$309.00	\$278.10		
511-732	1.4 - 2.5″	Indicator	6	4	\$316.00	\$284.40		
511-733	2.0 - 6.0"	optional	11 (2" sub anvil)	4	\$342.00	\$307.80		
511-734	4.0 - 6.5″	Protective Cover optional	13	4	\$511.00	\$459.90		
511-735	6.5 - 10″	(21DZÅ000)	6	7	\$599.00	\$539.10		
511-736	10 - 16″		5 (3" sub anvil)	7	\$752.00	\$676.80		









See Digimatic indicators made specifically for bore

# Holtest

### Holtest

> Titanium-coated measuring pins provide excellent durability and impact resistance, while allowing the instrument to measure close to the bottom of blind holes.

> Three-point design ensures self-centering action for stable measurements in the range above .275" bore diameter. > With ratchet stop for constant force.

### **Holtest Type II**

> Holtest Type II models are also available. These lower costs units have solid, hardened alloy steel anvils.

#### Mechanical Holtests - Individual Units

			I.
Order No.	Description/Range	List	Promo
368-021	Holtest, 0.08" - 0.1"	\$1,730.00	\$1,384.00
368-022	Holtest, 0.1" - 0.12"	\$1,730.00	\$1,384.00
368-023	Holtest, 0.12" - 0.16"	\$1,380.00	\$1,104.00
368-024	Holtest, 0.16" - 0.2"	\$1,380.00	\$1,104.00
368-025	Holtest, 0.2" - 0.24"	\$1,380.00	\$1,104.00
368-026	Holtest, 0.24" - 0.28"	\$1,380.00	\$1,104.00
368-261	Holtest, 0.275" - 0.35"	\$686.00	\$548.80
368-262	Holtest, 0.35" - 0.425"	\$686.00	\$548.80
368-263	Holtest, 0.425" - 0.5"	\$686.00	\$548.80
368-264	Holtest, 0.5" - 0.65"	\$712.00	\$569.60
368-265	Holtest, 0.65" - 0.8"	\$712.00	\$569.60
368-266	Holtest, 0.8" - 1.0"	\$739.00	\$591.20
368-267	Holtest, 1.0" - 1.2"	\$739.00	\$591.20
368-268	Holtest, 1.2" - 1.6"	\$924.00	\$739.20
368-269	Holtest, 1.6" - 2.0"	\$973.00	\$778.40
368-270	Holtest, 2.0" - 2.5"	\$980.00	\$784.00
368-271	Holtest, 2.5" - 3.0"	\$1,060.00	\$848.00
368-272	Holtest, 3.0" - 3.5"	\$1,090.00	\$872.00
368-273	Holtest, 3.5" - 4.0"	\$1,140.00	\$912.00
368-274	Holtest, 4.0" - 5.0"	\$1,470.00	\$1,176.00
368-275	Holtest, 5.0" - 6.0"	\$1,660.00	\$1,328.00
368-276	Holtest, 6.0" - 7.0"	\$1,710.00	\$1,368.00
368-277	Holtest, 7.0" - 8.0"	\$1,770.00	\$1,416.00
368-278	Holtest, 8.0" - 9.0"	\$2,000.00	\$1,600.00
368-279	Holtest, 9.0" - 10"	\$2,250.00	\$1,800.00
368-280	Holtest, 10" - 11"	\$2,270.00	\$1,816.00
368-281	Holtest, 11" - 12"	\$2,330.00	\$1,864.00

#### Mechanical Holtests - Complete Unit Sets

Order No.	Description/Range	List	Promo
368-916	Holtest, Set, 0.275" - 0.5"*	\$2,540.00	\$2,032.00
368-917	Holtest, Set, 0.5" - 0.8"*	\$1,710.00	\$1,368.00
368-918	Holtest, Set, 0.8" - 2.0"*	\$3,910.00	\$3,128.00
368-919	Holtest, Set, 2.0" - 4.0"*	\$5,560.00	\$4,448.00
368-920	Holtest, Set, 4.0" - 8.0"*	\$8,530.00	\$6,824.00
368-926	Holtest, 2pc Set, .08"12"*	\$3,660.00	\$2,928.00
368-927	Holtest, 4pc Set, .12"28"*	\$5,830.00	\$4,664.00







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Two-point contact type



#### Measuring Deep Holes An extension tube (optional accessory) can be fitted to enable measurement of deep holes.

#### Measuring a Blind Hole

The measuring contact points held in the jaws permit measuring the diameter of a blind hole to the bottom.  $\uparrow \uparrow \uparrow \uparrow$ 

nde	а	h	C
o to 100mm / 4"m	nodels	)	
o to 100mm / 4"m	odels	)	15

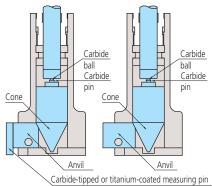
Range	а	b	c
6 - 12mm / .2755"	2	-	2.5
12 - 20mm / .58"	0.3	5.6	3.5
20 - 30mm / .8 - 1.2"	0.3	8.3	5.2
30 - 50mm / 1.2 - 2"	0.3	13	10
50 - 100mm / 2 - 4"	0.3	17	14
100 - 300mm / 4 - 12"	12.4	21	13.8





#### **Inspection Certificate Supplied as Standard**

An Inspection Certificate is supplied with each instrument, which assures product quality and safety. On request, Mitutoyo can issue a Calibration Certificate, at a cost, from our accredited calibration laboratory.



TiN coated contact points

### **Digimatic Holtest**

- > Titanium-coated measuring pins provide excellent durability and impact resistance, while allowing the instrument to measure close to the bottom of blind holes.
- >Large LCD readout.
- > Functions available: Presetting, Zero/ABS, Auto power On/Off, Data hold, Data output, Error alarm, Battery replacement alarm. >With ratchet stop for constant force.

#### **Digimatic Holtests – Individual Units**

Order No.	Range	List	Promo
468-261	Digimatic Holtest, .27535"	\$1,280.00	\$1,024.00
468-262	Digimatic Holtest, .35"425"	\$1,280.00	\$1,024.00
468-263	Digimatic Holtest, .4255"	\$1,290.00	\$1,032.00
468-264	Digimatic Holtest, 0.5" - 0.65"	\$1,390.00	\$1,112.00
468-265	Digimatic Holtest, 0.65" - 0.8"	\$1,390.00	\$1,112.00
468-266	Digimatic Holtest, 0.8" - 1"	\$1,440.00	\$1,152.00
468-267	Digimatic Holtest, 1.0 - 1.2"	\$1,440.00	\$1,152.00
468-268	Digimatic Holtest, 1.2" - 1.6"	\$1,470.00	\$1,176.00
468-269	Digimatic Holtest, 1.6" - 2.0"	\$1,480.00	\$1,184.00
468-270	Digimatic Holtest, 2" - 2.5"	\$1,610.00	\$1,288.00
468-271	Digimatic Holtest, 2.5" - 3"	\$1,610.00	\$1,288.00
468-272	Digimatic Holtest, 3" - 3.5"	\$1,630.00	\$1,304.00
468-273	Digimatic Holtest, 3.5" - 4"	\$1,650.00	\$1,320.00
468-274	Digimatic Holtest, 4" - 5"	\$2,150.00	\$1,720.00
468-275	Digimatic Holtest, 5" - 6"	\$2,220.00	\$1,776.00
468-276	Digimatic Holtest, 6" - 7"	\$2,350.00	\$1,880.00
468-277	Digimatic Holtest, 7" - 8"	\$2,440.00	\$1,952.00
468-278	Digimatic Holtest, 8" - 9"	\$2,620.00	\$2,096.00
468-279	Digimatic Holtest, 9" - 10"	\$2,670.00	\$2,136.00
468-280	Digimatic Holtest, 10" - 11"	\$2,770.00	\$2,216.00
468-281	Digimatic Holtest, 11" - 12"	\$2,880.00	\$2,304.00

#### **Digimatic Holtests – Interchangeable Head Sets**

Order No.	Range	List	Promo
468-976	Digimatic Holtest Head Set, 0.275" - 0.5"*	\$2,330.00	\$1,864.00
468-977	Digimatic Holtest, Head Set, 0.5" - 0.8"*	\$1,890.00	\$1,512.00
468-978	Digimatic Holtest, Head Set, 0.8" - 2"*	\$4,720.00	\$3,776.00
468-979	Digimatic Holtest, Head Set, 2" - 4"*	\$5,410.00	\$4,328.00
468-980	Digimatic Holtest, Head Set, 4" - 8"*	\$6,350.00	\$5,080.00

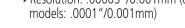
#### **Digimatic Holtests – Complete Unit Sets**

Order No.	Range	List	Promo	
468-986	Digimatic Holtest, Unit-Set, 0.275" - 0.5"*	\$4,530.00	\$3,624.00	
468-987	Digimatic Holtest, Unit-Set, 0.5" - 1"*	\$4,820.00	\$3,856.00	
468-988	Digimatic Holtest, Unit-Set, 1" - 2"*	\$5,460.00	\$4,368.00	
468-989	Digimatic Holtest, Unit-Set, 2" - 3"*	\$6,130.00	\$4,904.00	
468-990	Digimatic Holtest, Unit-Set, 3" - 4"*	\$7,210.00	\$5,768.00	
Prices effective March 15, 2024 through June 28, 2024				

> Measure deep holes by attaching an extension rod (optional).

> Setting rings are included in sets, but optional for individual gages.

- > Supplied in fitted plastic case up to 4"/100mm. Over 4"/100mm supplied in wooden case.
- > Resolution: .00005"/0.001mm (over 4"





Holtest







Complete-Unit Set

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Interchangeable-Head Set

# Borematic

### Borematic

Quick, spring-loaded lever action/movement

- >Titanium-coated measuring pins provide excellent durability and impact resistance, while allowing the instrument to measure close to the bottom of blind holes.
- > Digital display with guick-action lever operation enables guick and easy measurement.
- >Built-in ABSOLUTE System eliminates the need to set the origin point every time the unit is turned on. The system is immune to over-speed errors, thus increasing the reliability of measurement.
- >The Digimatic Borematic is compatible with statistical process control systems and measurement support systems.
- > Built-in tolerance judgment function allows GO/NO-GO judgment based on user-defined upper and lower limit settings.

## **MeasurLink**<sup>®</sup> ENABLED

Individual Gages: includes one digital display unit and one interchangeable measuring head (plus adapter if required)

Order No	Size Range	Accuracy	Extension Rod	List	Promo
568-461	0.275" - 0.350"		\$1,660.00	\$1,328.00	
568-462	0.350" - 0.425"	±5µm ±0.00025 in	100mm ( <b>952322</b> )	\$1,660.00	\$1,328.00
568-463	0.425" - 0.500"	10.00025 111		\$1,660.00	\$1,328.00
568-464	0.50" - 0.65"	±5μm 150mm ( <b>052621</b> )	\$1,700.00	\$1,360.00	
568-465	0.65" - 0.80"	±0.00025 in	150mm ( <b>952621</b> )	\$1,700.00	\$1,360.00
568-466	0.8" - 1.0"		\$1,700.00	\$1,360.00	
568-467	1.0" - 1.2"		150mm ( <b>952622</b> )	\$1,760.00	\$1,408.00
568-468	1.2" - 1.6"			\$1,940.00	\$1,552.00
568-469	1.6" - 2.0"			\$1,940.00	\$1,552.00
568-470	2.0" - 2.5"	±6µm		\$1,900.00	\$1,520.00
568-471	2.5" - 3.0"	±0.0003 in		\$1,970.00	\$1,576.00
568-472	3.0" - 3.5"		150mm (052622)	\$2,000.00	\$1,600.00
568-473	3.5" - 4.0"		150mm ( <b>952623</b> )	\$2,000.00	\$1,600.00
568-474	4.0" - 4.5"			\$2,100.00	\$1,680.00
568-475	4.5" - 5.0"			\$2,220.00	\$1,776.00

**Complete Unit Gage Sets:** includes several individual gages to cover the overall size range of the set

Order No	Overall Range	Range of Individual Gages	Setting Rings	List	Promo
568-965	0.275" - 0.5"	0.275-0.35", 0.35-0.425", 0.425-0.5"	0.35" DIA., 0.425" DIA.	\$5,750.00	\$4,600.00
568-966	0.5" - 1"	0.5-0.65", 0.65-0.8", 0.8-1"	0.65" DIA., 0.8" DIA.	\$5,990.00	\$4,792.00
568-967	1" - 2"	1-1.2", 1.2-1.6", 1.6-2"	1.2" DIA., 1.6" DIA.	\$6,260.00	\$5,008.00
568-968	2" - 3"	2-2.5", 2.5-3"	2.5" DIA.	\$4,480.00	\$3,584.00
568-969	3" - 4"	3-3.5", 3.5-4"	3.5" DIA.	\$4,970.00	\$3,976.00

#### Interchangeable-Head Sets

Order No	Overall Range	Range of Individual Gages	Setting Rings	List	Promo
568-928	0.275" - 0.5"	0.275-0.35", 0.35-0.425", 0.425-0.5"	0.35" DIA., 0.425" DIA.	\$2,560.00	\$2,048.00
568-929	0.5" - 1"	0.5-0.65", 0.65-0.8", 0.8-1"	0.65" DIA., 0.8" DIA.	\$2,890.00	\$2,312.00
568-930	1" - 2"	1-1.2", 1.2-1.6", 1.6-2"	1.2" DIA., 1.6" DIA.	\$3,540.00	\$2,832.00
568-936	2" - 4"	2-2.5", 2.5-3", 3-3.5", 3.5-4"	2.5" DIA., 3.5" DIA.	\$5,090.00	\$4,072.00

Includes one digital display unit with several interchangeable measuring heads (and adapters as required) to cover the total size range plus one extension rod



# Mitutoyo

SAVE 20%

#### SPC





Resolution: in/0.001mm	0.001mm or 0.00005
Display:	LCD
Response speed:	Infinite
Battery:	SR44 (1 pc), <b>938882</b> ,
	for initial operational checks (standard accessory)
Battery life:	Approx. 5,000 hours in
	continuous use
Scale type:	Electrostatic capacitance absolute
	encoder
Functions	

#### Functions

GO/NO-GO judgment, GO/NO-GO judgment zoom, 2-Point Preset, Zero-setting, Data hold, Error alarm, Low battery voltage alert, Data output, Function Lock, 330° rotary display, inch/mm conversion (inch/mm models)





# **Profile Projectors**

# **Profile Projectors**

**OFF Main Unit & 5% OFF DRO)** 

### PH-3515F Profile Projector and 2D Processor Packages

Heavy-Duty, Bench-Top Model with Horizontal Optical System featuring touch screen M2 geometric measuring display

>ø14" screen, Horizontal Projector > 10" x 6" Travel T Slot table for accessories Linear Glass Scales for accurate measurement > Profile and Fiber Optic Surface Illumination

> Digital built-in angle counter >Maximum Load 45 kg / 100lb > Available with M2 or QM Data 2D Processors

Order No.	Description	List	Promo
PH-3515 Mai	in Unit & Digital Readout Packages 5% Off		
64PKA089B	PH-3515F Profile Projector with KA counter & Tray	\$13,300.00	\$12,635.00
64PKA088A	PH-3515F Profile Projector with QM Data & Arm Mount	\$15,400.00	\$14,630.00
64PKA166	PH-3515F Profile Projector with Touchscreen PC & M2 Software/Hardware	\$16,600.00	\$15,770.00
64PKA165	PH-3515F Profile Projector with Optical Edge Detection, Touchscreen PC & M2 Software/Hardware	\$18,200.00	\$17,290.00
Machine Sta	nd (Optional)		
64AAB176	PH-3515F Stand (optional add-on)	\$787.00	\$787.00

(Includes installation and A2LA accredited calibration)

## Compatible Digital-Read-Out (DRO) Devices

M2 Software & Hardware: PH-3515 & PJ-PLUS M2 is a universal 2D coordinate measurement



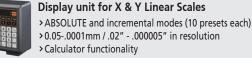
software which has become the preferred software for many optical comparator users due to its intuitive user interface and data collection procedures.

> Software & All-In-One Touch Screen PC Included > Full Integration and A2LA Calibration conducted



#### KA-200 Counter: PH-3515 & PV-5110

**MeasurLink**<sup>®</sup> ENABLED



5% off a

#### Automatic Edge Detection



5%

Fiber Optic Edge Detection system integrated into M2 software via M2 Communication Unit. ntuitive Edge Teach Functionality built into software.

Allows for continuous measurement of features, while storing data for post process analysis

#### PJ-Plus with M2 2D Processor Packages

The PJ-Plus is a new series of profile projector offered by Mitutoyo. This system utilizes LED lighting and a fan-less design making it ideal for harsh manufacturing facilities or job shop.

Order No	Description	XY Stage	List	Promo
PJ-PLUS Main Unit	s - 5% Off			
302-801-10A	PJ-P1010A 4x4"/100x100m	4x4"/100x100m	\$12,400.00	\$11,780.00
302-802-10A	PJ-P2010A 8X4"/200x200mm	8X4"/200x200mm	\$15,500.00	\$14,725.00
PJ-PLUS & M2 Pack	ages - 5% Off			
302-801-10PKA1	PJ-PLUS 4X4 - M2, Optical Edge Detection and Touchscreen	4x4"/100x100mm	\$18,700.00	\$17,650.00
302-801-10PKA2	PJ-PLUS 4x4 - M2 and Touchscreen PC Package	4x4"/100x100mm	\$17,300.00	\$16,435.00
302-802-10PKA1	PJ-PLUS 8x4 - M2, Optical Edge Detection and Touchscreen	8x4"/200x100mm	\$21,900.00	\$20,805.00
302-802-10PKA2	PJ-PLUS 8x4 - M2 and Touchscreen PC Package	8x4"/200x100mm	\$20,500.00	\$19,475.00
Machine Stand (Op	otional)			
172-269	Machine Stand for PJ Se	eries	\$1,900.00	\$1,900.00



#### it an optimal choice for precise applications, particularly with thin or delicate workpieces. >ø19.4" screen, Vertical Projector > Downward Optical Axis - Provides improved oblique surface illumination

#### >LED illumination > Built-In Dual Obligue Surface Illumination for improved contrast.

Order No.	Description	List	P
PV-5110 Main Unit & Di	gital Readout Interface Packages -	5% Off	
304-919-11A-KA	PV-5110 with KA Counter	\$23,200.00	\$22
304-919-11A-QM	PV-5110 with QM Data	\$25,580.00	\$24
304-919-11A-QM-OPT	PV-5110 with QM Data and OPTOEYE	\$27, 540.00	\$26

No stand or elevated surface required\*

## Additional DRO

#### QM Data: PH-3515, PJ-PLUS, PV-5110 & PJ-H30



2.414 00 114 1/3 1/2012001211

Calculations Return 2-Dimensional Graphic and Calculated Values

## **PJ-H30 Vertical Profile Projector**

projected image appears in the same orientation as the workpiece.

> Newly designed optical system with high NA
lenses provides drastically brighter and clearer
screen images
>The three-lens mounting turret includes a

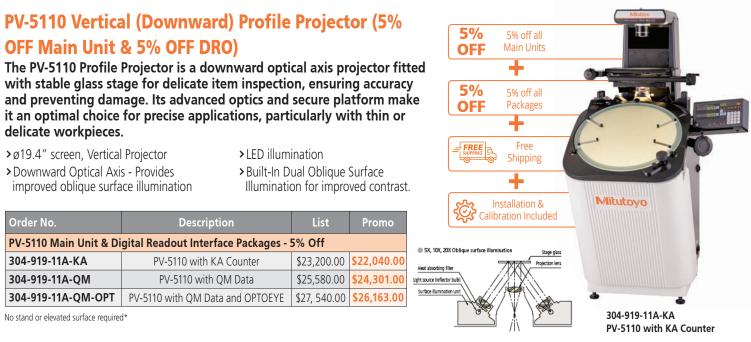
> Built-In digital XY Counter > Available with QM Data 2D processor & Optical Edge Detection

unree-iens mounting turret includes a 10X lens as standard

Order No.	Description	XY Travel	List	Promo						
PJ-H30 Main Units - 259	PJ-H30 Main Units - 25% OFF									
303-716-13A	PJ-H30A1010B	4x4"/100x100mm	\$26,500.00	\$19,875.00						
303-717-13A	PJ-H30A2010B	8x4"/200x100mm	\$32,300.00	\$24,225.00						
303-718-13A	PJ-H30A2017B	8x6.7"/200x170mm	\$38,200.00	\$28,650.00						
303-719-13A	PJ-H310A3017B	12x6.7"/300x170mm	\$44,100.00	\$33,075.00						
<b>Digital Readout Interfa</b>	ce (Add-On Packages - O	ptional) - 5% Off								
264-156A-PJH	QM-DATA200 Arm Typ	oe (PJ-H Series Package)	\$4,140.00	\$3,933.00						
264-156A-PJH-OPT	QM-DATA200 Arm T	ype & Optoeye (PJ-H)	\$6,160.00	\$5,852.00						
Machine Stand (Option	al)									
172-269	Machine Stan	d for PJ Series	\$1,900.00	\$1,900.00						

Prices effective March 15, 2024 through June 28, 2024

## **Mitutoy**o



The QM-Data200 unit features the powerful QM 2D coordinate measurement software pre-loaded onto our rugged user interface. The QMData200 interface features easy-to-use key operations and allows for measurement results to be visualized on its LCD Display.

**MeasurLink**<sup>®</sup> ENABLED

> Built-In Guided Measurement Tutorials > Programmable Measurement Procedures &

> Data Collection and USB Output > Full Integration and A2LA Calibration conducted by Mitutoyo Field Service team.



# The Mitutoyo PJ-H30 is unique given its ability to produce an uninverted image, which improves the intuitive operation as the



# LH-600F LH-600F





109.3220 mm

0.0139 🔜

89.9973 💻

Show results after measurement

0.0129 🔜 —

4

0.0139 🚟 📷📷

-**2** 

\$9,360.00

\$9,810.00

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6000

in graph form.

Show measurement results

## Easy operation using keypad and touch screen navigation

Contextual guidance on the large-screen touch panel supports your measurements.



### Touch panel with guidance

Measurement guidance is displayed on the large touch panel of the 8.4-inch color LCD, enabling intuitive operation.

127.6677

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Part program

measurement

## **P** Measurement origin setting













Operable with gloves

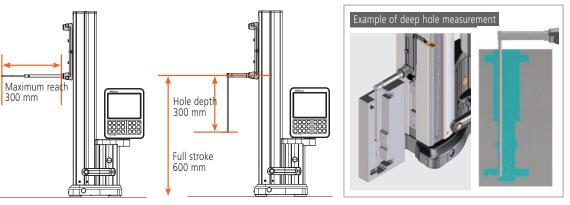


#### Expanded measurement area

1 T I +

Guidance screen

With the new optional probes, you can now measure areas that were beyond the capacity of conventional probes.



Order No Description Range (Stroke) **Resolution (selectable)** Promo030 LH-600F INCH/MM 0.0001/0.001/0.01/0.1mm 977mm (600mm) / 38" (24") .0000001/.000001/.00001/.0001' Promo031 LH-600FG Inch/mm, Power Grip model

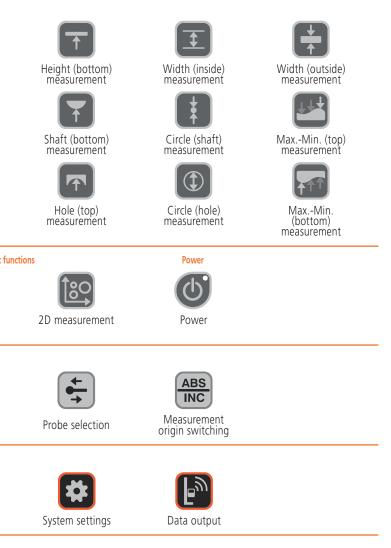
Prices effective March 15, 2024 through June 28, 2024

## **10% OFF** PLUS Complimentary Mitutoyo A2LA Accredited Calibration & Shipping

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#### Simple, straightforward keys with icons

Icons allow the user to find the required operation at a glance.



To see full brochure.

use the OR code below.





# Height Gages

## **10% OFF** PLUS Complimentary Shipping 5% OFF Accessories



**ABSOLUTE 1D Height Gage QM-Height Series** 

- > High-resolution ABSOLUTE linear encoder for position detection
- > High-accuracy:  $\pm (2.4 + 2.1L / 600) \mu m$
- > Pneumatic flotation system / positioning grip allows for smooth movement along surface plate (select models)
- > Large, stationary display panel with user-friendly icon control keys and GO/NÓ-GÓ LÉD indicator
- > Digital and USB output: Supports Mitutoyo wireless SPC
- > Fully compatible with existing Mitutoyo Digimatic peripherals (SPC cables, U-WAVE wireless transmitters, multiplexers, etc.)
- > Battery life of 1200 hours in continuous use with four AA batteries, an improvement from 300 hours.

#### GO/±NG judgment by LED (red, orange, green) and measurement examples

>LEDs are activated at the time of tolerance judgment: green for GO, red for +NG, and orange for -NG. -NG, GO and +NG also appear on the LCD.

ABS



Data Management Software by Mitutov

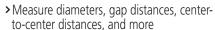


## d2 Digimatic and USB outputs

• Digimatic and USB ports are provided as standard. Using the U-WAVE-T measurement data wireless communication system enables instant transmission of measurement data to a PC via wireless communication which reduces manual input errors and improves data reliability and operational efficiency.



To install **U-WAVE-T**, separately purchase the optional mounting plate (02AZE990).



> Sub-display can show difference between current and previous measurement or distance from current measurement to origin

> The origin can be set at the top of a surface plate, centerline, or any top or bottom surface within its range

#### **Measurement Examples**



Part No.	Range	Resolution	Remarks	List	Promo
64PKA094C	0 - 14"/ 0 - 350mm			\$4,580.00	\$4,122.00
64PKA095C	0 - 24"/ 0 - 600mm	0.001mm / 0.0005mm /00005" / 0001" (coloctable)		\$5,150.00	\$4,635.00
64PKA129C	0 - 14″/ 0 - 350mm	0.001mm / 0.0005mm /.00005" / .0001" (selectable)	Pneumatic Flotation	\$5,150.00	\$4,635.00
64PKA130C	0 - 24"/ 0 - 600mm		System	\$5,710.00	\$5,139.00

#### **Optional Accessories**

1			
Order No.	Description	List	Promo
12AAC072	DEPTH PROBE	\$227.00	\$215.65
12AAA837	INDICATOR HOLDER (ACCEPTS 3/8" STEM)	\$159.00	\$151.05
12AAA793	PROBE EXTENSION HOLDER (3.3" / 85mm)	\$184.00	\$174.80
226118	SHANK WITH M3 THREAD SCREW	\$145.00	\$137.75
957265	20MM DIA. DISK STYLUS FOR LINEAR HEIGHT	\$437.00	\$415.15
957264	14MM DIA. DISK STYLUS FOR LINEAR HEIGHT	\$342.00	\$307.80
12AAF669	10PI BALL CONTACT POINT(COAXIAL)	\$269.00	\$255.55
957261	2MM DIA. BALL STYLUS FOR LINEAR HEIGHT	\$241.00	\$228.95
517-814-10	GRAPLATE 36X48" GRADE A	\$3,200.00	\$3,040.00
517-964-10	GRAPLATE STAND 36X48"	\$1,260.00	\$1,197.00
517-808-10	GRAPLATE 24X36" GRADE A	\$1,670.00	\$1,586.50
517-956-10	GRAPLATE STAND 24X36"	\$1,170.00	\$1,111.50
06AFM380D	USB-ITN-D INPUT TOOL DIRECT CABLE	\$226.00	\$214.70
02AZD730G-D	U-WAVE TRANSMITTER W/ CONNECTING CABLE (D)	\$378.00	\$359.10
02AZD810D	U-WAVE-RECEIVER	\$571.00	\$542.45



Prices effective March 15, 2024 through June 28, 2024

# **Mitutoy**



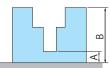


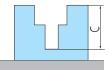
#### Runout

value

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value
Min.







# Calipers / Caliper Checker

**(IP)**67

BSOLUT

ABSOLUTE

**MeasurLink**<sup>®</sup> ENABLED

COOLANT PROOF TO 10767

COOLANT PROOF is the universal term of Mitutoyo Digimatic Small Tool Instruments that are free from measurement

error and physical deterioration due to routine exposure to water, cutting oil or coolant. This high performance is

achieved by using encoders that are inherently immune to contamination, where exposure is inevitable, combined

with comprehensive sealing techniques and extremely

oil-resistant materials to guarantee a long working life

under normal operating conditions.

## **Coolant-Proof Calipers**

- > Sealed housing is IP-67 rated, meaning it's immune to the coolants, dirt, grit and chips found in many manufacturing environments.
- > Easy to use no need to wipe or clean the scale.
- >.0005"/0.01mm resolution with ±.001" accuracy.
- > Automatic power-on/off.
- > Certificate of Inspection provided.

Order No.	Range	List	Promo
Non-Output Style			
500-752-20	0-6"/0-150mm	\$246.00	\$233.70
500-753-20	0-8"/0-200mm	\$330.00	\$313.50
500-754-20	0-12"/0-300mm	\$571.00	\$542.45
SPC Output Style			
<b>7</b> 500-762-20	0-6"/0-150mm	\$292.00	\$277.40
<b>t</b> 500-763-20	0-8"/0-200mm	\$368.00	\$349.60
t 500-764-20	0-12"/0-300mm	\$634.00	\$602.30
* ±.0015" accuracy (fit	U-WAVE Fit compatible	PC cable – 1m: <b>05CZ</b>	4624 2m: 05CZA62

## **Digimatic Carbon Fiber Caliper**



157

0 10



Order No	. к	ange	Accura	acy	Kesolu	tion	List		Prom	10
552-312-1	<b>0</b> 0(.)	5")-18"	+/00	2″	.0005″/0.	01mm	\$1,110.0	00	\$1,054	.50
552-313-1	<b>0</b> 0(.	5")-24"	+/00	2″	.0005″/0.	01mm	\$1,250.	00	\$1,187	.50
552-314-1	0 0(1	")-40"	+/00	2″	.0005″/0.	01mm	\$2,240.	00	\$2,128	.00
552-315-1	0 0(1	")-60"	+/00	4″	.0005″/0.	01mm	\$2,670.	00	\$2,536	.50
552-316-1	0 0(1	")-80"	+/00	5″	.0005″/0.	01mm	\$4,180.	00	\$3,971	.00

SPC cable - 1m: 05CZA624 2m: 05CZA625

### **CERA Caliper Checker**



Order No.	Range	Remarks (length to check)	List	Promo				
515-565	0 - 12"	Outside measurement: 1", 2", 4", 6", 8", 10", 12" Inside measurement: 1", 2", 4", 6", 8", 10", 12"	\$5,180.00	\$3,470.60				
Prices effective Ma	Prices effective March 15. 2024 through June 28. 2024							



- > Lightweight Digimatic Calipers that employ CFRP (Carbon Fiber Reinforced Plastics) in the beam and jaws.
- > Highly durable and easy to handle.

COMPATIBLE WITH

**U-WAVE** fit

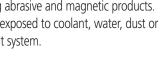
- > Direct readout of ID measurements from the LCD. (Offset value can be set easily by pressing the Offset key.) > Preset function for setting a desired
- starting point.
- > With SPC data output.
- > Special models available with ceramic
- jaws which are suitable for measuring abrasive and magnetic products.
- > Can be used in workshop conditions exposed to coolant, water, dust or oil.
- > Incorporates ABSOLUTE measurement system.
- > Automatic power-on/off.

#### **CERA Caliper Checker**

- > Permanently wrung, high grade CERA gage blocks in a protective metal casing. > Stands perpendicular for height gage inspection.
- \* Also includes same features as CERA Gage Blocks

### CERA (Zirconia Ceramic) Gage Blocks\*

- > Extremely high wear resistance, 3x better than carbide.
- > Corrosion proof no oil needed. > Closest expansion coefficient to steel.
- > Anti-magnetic keeps away steel dust.



> High wringing force due to high

excellent dimensional stability

under brief temperature changes

 Crack and burr resistant. > Low thermal conductivity –

(from handling, etc.).

505-742-56J

without thumb roller

> Smooth sliding with high shock protection.

**500-506-10** 0-24"/0-600mm

>Lock screw for dial bezel and for holding the sliding jaw position.

- > Can measure OD, ID, depth and steps.
- > Models available with carbide-tipped OD and ID jaws.

Order No.	Range	Remarks	List	Promo
505-742J	0 -6" .100"/rev		\$149.00	\$141.55
505-738J	0 -6" .100"/rev	carbide-tipped jaws	\$243.00	\$230.85
505-740J	0-6".200"/rev		\$136.00	\$129.20
505-743J	0 -8" .100"/rev		\$217.00	\$206.15
505-746J	0 -12" .100/rev		\$331.00	\$314.45
505-749J	0 -12" .200/rev		\$309.00	\$293.55
505-742-56J	0-6" .100"/rev	black dial face	\$149.00	\$141.55

Calipers / Caliper Checker

### **Digimatic Calipers**

- >AOS Electromagnetic inductive sensor improves environmental resistance against dirt, water and oil.
- > A battery life of approximately 3.5 years has been achieved under normal use through the adoption of Mitutoyo's ABSOLUTE scale.
- > The slider configuration features an ergonomic, thumb-friendly

> Step-measurement capable. > The data output function allows integration into Statistical Process Control and measurement

- systems. > Display character height: 9mm
- >AOS applies to 4", 6" and 8" models

> Resolution: .0005"/0.01mm

	shape.		MeasurLin		
			Data Management S		10
			500-171-30		
		Ş	ABSOLUTE® Abdelits System Parend by MT01010	DIGI	
	Order No.	Range	Remarks	List	Promo
	No SPC Out	put Style			
	500-195-30	0-4"/0-100mm	.075" round depth bar	\$170.00	\$161.50
	500-196-30	0-6"/0-150mm		\$184.00	\$174.80
	500-197-30	0-8"/0-200mm		\$265.00	\$251.75
	500-193-30	0-12"/0-300mm		\$532.00	\$505.40
	With SPC Ou	itput Style			
t	500-170-30	0-4"/0-100mm	.075" round depth bar	\$203.00	\$192.85
t	500-171-30	0-6"/0-150mm		\$215.00	\$204.25
	500-172-30	0-8"/0-200mm		\$284.00	\$269.80
	500-173-30	0-12"/0-300mm		\$621.00	\$589.95
	500-505-10	0-18"/0-450mm	without thumb roller	\$967.00	\$918.65

fit U-WAVE Fit compatible

SPC cable with data switch – 1m: **959149** 2m: **959150** 

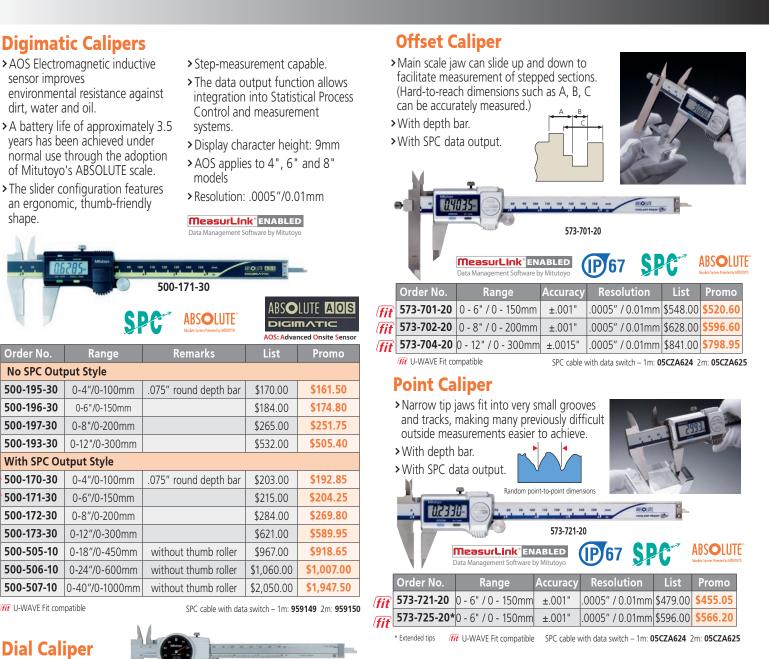
\$1.060.00



density.



# **Mitutoy**



## Low-Force Caliper

- > Due to the low measuring force, these calipers are ideal for elastic or resilient workpieces such as plastic parts and rubber parts that standard calipers can't measure consistently.
- >With SPC data output.



			0	57:	3-291-30	HOMATHE
	E.			ink <sup>®</sup> ENABLED	SP	C
	Order No.	Range	Accuracy	Resolution	List	Promo
fit	573-291-30	0 - 7" / 0 - 180mm	±.002"	.0005" / 0.01mm	\$968.00	\$919.60
	(fit U-WAVE Fit co	ompatible			www.mi	tutovo com

# Micrometers

# Micrometers

## **Ouickmikes**

The new Quickmike series still boasts the super-fast spindle feed rate that's **20x faster** than standard micrometers.

- > IP65 protection can be used around cutting fluids
- > MIN Hold the minimum measurement can be held on the display for more repeatable and accurate measurements

>Larger LCD – 33% larger, 10mm character height

- > Function lock prevents accidental changes
- > 5 year battery life more operating time, less downtime looking for and replacing batteries

>Non-rotating spindle



#### COOLANT **PROOF**<sup>™</sup> (P65 **MeasurLink**<sup>®</sup> ENABLED

Data Management Software by Mitutoyo

Order No.	Range	Resolution	Accuracy	Flatness	Parallelism	List	Promo
293-676-20	0 - 1.2″	.00005″/0.001mm	±0.0001"	0.000012″	0.00008″	\$700.00	\$665.00
293-677-20	1 - 2.2″	.00005″/0.001mm	±0.0001"	0.000012″	0.00008″	\$764.00	\$725.80

## **MDC-Lite Micrometer**

> Provided only with zero set and in/mm (inch/metric models only) keys.

> A ratchet stop or friction thimble for a constant measuring force.

> Measurement readout with large characters on the LCD.

> No spindle clamp. No data output.

Order No.	Range	Resolution	Remarks	List	Promo
293-831-30	0 - 1" / 0 - 25.4mm	.00005" / 0.001mm	Ratchet Stop	\$178.00	\$169.10
293-832-30	0 - 1" / 0 - 25.4mm	.00005" / 0.001mm	Friction Thimble	\$189.00	\$179.55

## **Digimatic Micrometer**

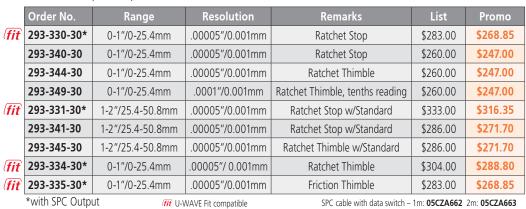
- >New electromagnetic ABSOLUTE sensor Improved resistance to environmental conditions such as dirt, oil and water, which can cause false readings.
- >New ratchet thimble on select models improves one-hand operability.
- > New anti-slip finish for improved grip while taking measurements.

>Long battery life – 2.4 years under normal operation.

>Fully compatible with existing Mitutoyo Digimatic peripherals (SPC Cables, U-WAVE wireless transmitters, DP1-VA, etc.) – SPC output-enabled IP65 models.

> Function-lock system prevents inadvertent setting changes. > Certificate of Inspection provided.

SPC



Prices effective March 15, 2024 through June 28, 2024



# Purchase the world's first 5µinch /0.1µm resolution micrometer and receive a USB input tool and cable (\$300 value)

Using precision digital measuring tools together with a USB input tool improves both measurement results and data reliability. The high-accuracy MDH with 5 millionths resolution can output in its entirety in both inch and metric. Resulting data can input directly to Excel®, MeasurLink® or other SPC programs.

>Range: 0-1", Resolution: .000005", Accuracy: +/- .000020

Part No.	Description	List Price
PROMO029	Package: MDH Mic, SPC Cable, USB Input Tool	\$1,920.0
293-130-10	MDH Micrometer with high accuracy, high resolution output	\$1,920.0
05CZA662	SPC CONNECTING CABLE (1M)	\$96.05
264-020	USB INPUT TOOL	\$226.00

### **Absolute Digimatic Height Gages**

Mitutoyo's popular, single beam height gages have been redesigned to be even easier to use, with larger displays, various hardware accessories, and multiple data options such as wired and wireless output, data loggers and more.

#### Features:

> Durable Build - Iron detector and base, steel beam and holder

- > Easy to use slider feed wheel
- > Multiple data equipment options
- > Other improvements: twist-off battery cap, 20% larger LCD, handy Data button

<b>MeasurLink</b> ® ENABLED
Data Management Software by Mitutoyo



Order No.	Range	Resolution	Functions	Drive Method	Data Output	Max. response speed	Battery Life	List	Promo
570-412	0"-12"/0mm-300mm		On/Off, Origin,	3S, Hold/   Slider-feed wheel	Digimatic	Unlimited	Approx. 5 years under	\$860.00	\$817.00
570-413	0"-18"/0mm-450mm		Zero/ABS, Hold/ Data, inch/mm					\$1,150.00	\$1,092.50
570-414	0"-24"/0mm-600mm		U'''' Data, inch/mm (manual) conversion"	ul		normal use	\$1,340.00	\$1,273.00	



*n 18985* 

# COOLANT PROOF



MeasurLink<sup>®</sup> ENABLED



# 293-831-30





# Mitutoyo U-WAVE Bluetooth<sup>®</sup> Wireless Data Transmitters

NEW

roduct:

# **U-WAVE** Wireless Data Transmitters

U-WAVE is a wireless system that turns any Mitutoyo gage with Digimatic output into a wireless keyboard for fast, error-free data collection. U-WAVE transmitters now come in three models: Bluetooth®, Fit and Standard. Send data with a push of a button or request it from the PC or mobile device.

### **U-WAVE Bluetooth®**

### **U-WAVE-TMB/TCB**

The new U-WAVE Bluetooth® transmitter features:

- >Now utilizes the popular Bluetooth® 4.2 Low Energy Wireless Technology.
- >This new Bluetooth<sup>®</sup> version of U-WAVE allows a simple connection to smartphones. tablets and Bluetooth<sup>®</sup> enabled Laptops and PC's.
- > The same low profile and ergonomic fit benefits of the U-WAVE Fit.
- > A buzzer type and IP67 type with dustproof and waterproof specifications are available.
- > Up to 7 units can be connected to 1 Bluetooth<sup>®</sup> enabled PC without a receiver.
- >New U-WAVEPak for Android, iOS and Windows available at no cost.





#### U-WAVE-TMB/TCB\*

Order No.	Model	Measuring Instrument*	Remarks	List	Promo
264-624-IP-S	U-WAVE-TCB	4", 6", 8", 12" standard caliper	TRANSMITTER AND CONNECTION UNIT	\$285.00	\$256.50
264-624-IP	U-WAVE-TCB	4", 6", 8", 12" IP67 caliper	TRANSMITTER AND CONNECTION UNIT	\$285.00	\$256.50
264-626-IP-M	U-WAVE-TMB	COOLANT-PROOF (IP65) micrometer	TRANSMITTER AND CONNECTION UNIT	\$285.00	\$256.50
02AZF700-TMB	U-WAVE-TMB	0.5" (12.5MM) STROKE for S1 INDICATORS	TRANSMITTER AND CONNECTION UNIT	\$320.00	\$288.00
02AZG011-TMB	U-WAVE-TMB	1" (25.4MM) STROKE OR LARGER for S1 INDICATORS	TRANSMITTER, BRACKET, AND CONNECTION UNIT	\$385.00	\$346.50

\* No U-WAVE Receiver required

Prices effective March 15, 2024 through June 28, 2024



Request an assessment to determine how quickly your company can obtain a full ROI



The new Mitutoyo U-WAVE Fit wireless data transmitter fits to the back of popular Mitutoyo hand-held measuring instruments. This new design allows for a snug fit behind the display resulting in a more ergonomic feel. U-WAVE Fit is the same technology as the U-WAVE T, iust a smaller version.



U-WAVE-TM for micrometers and U-WAVE-TC for calipers are available both as, the buzzer and water/dust-proof IP67 types. The buzzer type notifies the normal reception of data by LED and buzzer sound. The water/dust-proof IP67 type is designed for harsh environments and therefore, is only equipped with LED notification of data reception

U-WAVE-Fit (Transmitter)								
Order No.	Model	Measuring Instrument*	Remarks	List	Promo			
264-620-IP-S	U-WAVE-TC	4", 6", 8", 12" IP67 standard caliper	TRANSMITTER AND CONNECTION UNIT	\$285.00	\$256.50			
264-620-IP	U-WAVE-TC	4", 6", 8", 12" IP67 caliper	TRANSMITTER AND CONNECTION UNIT	\$285.00	\$256.50			
264-622-IP-M	U-WAVE-TM	COOLANT-PROOF (IP65) micrometer	TRANSMITTER AND CONNECTION UNIT	\$285.00	\$256.50			
02AZF700-TM	U-WAVE-TM	0.5" (12.5MM) STROKE for S1 INDICATORS	TRANSMITTER AND CONNECTION UNIT	\$320.00	\$288.00			
02AZG011-TM	U-WAVE-TM	1" (25.4MM) STROKE OR LARGER for S1 INDICATORS	TRANSMITTER, BRACKET, AND CONNECTION UNIT	\$385.00	\$346.50			

\* Please contact Mitutoyo or distributor for further details

#### LI-WAVE-R (Receiver)

Order No.	Remarks	Software	Number of U-WAVE-R units that can be connected to PC	Number of U-WAVE-T units that can be connected	List	Promo
02AZD810D	U-WAVE-R + software	U-WAVE PAK	Up to 15	Up to 100	\$549.00	\$494.10

## **MeasurLink Quality Data Management Software**

Monitor, analyze, collect, calibrate, report and improve.



Achieve Total Quality Management with the Total Quality MeasurLink® license. This is a single floating license that can be accessed by anyone and anywhere on the network with every single module. For the engineer(s) who wants total freedom to continuously improve their quality department. No annual fees.

Order No.	Remarks	List	Promo
64AAB855F	MeasurLink V10 Single Floating License	\$3,110.00	\$2,488.00



**MeasurLink**<sup>®</sup> ENABLED

- The transmitter is designed to fit in the space behind the display, and the connecting cable has been replaced by a rigid connector
- Approx. 20 m transmission range (within visible range)
- 2.4GHz wireless system for reliable and secure data transmission
- Easy data export to Microsoft<sup>®</sup> Excel<sup>®</sup> or SPC software applications
- Transmitter confirms data transfer by an LED signal and optional buzzer
- An IP67 transmitter is available to ensure a coolant-proof gaging system
- Low power consumption: 400,000 data transmissions with a single battery

#### TOM License Includes:

- > Real-Time SPC
- >Advanced Data Analysis
- > Automated Reporting and Analysis
- > Data Collection Alerts
- > Gage Inventory Management
- Gage Calibration
- >Gage R&R
- > Automated Ballooning
- >And more!

# Litematic Units with Vacuum

# Linear Gages / EJ Counters

### **Solution for Battery Foil Thickness Measurement**

The key to success:

- High accuracy thickness measurement of battery foil samples
- > The combination of the Litematic and the vacuum plate system provides high accuracy measurement of easily deformed material.
- > Litematics allow measurements at forces as low as 0.01N. The ceramic ball contact included with the Vacuum Packages will increase the force to 0.04N.
- > The vacuum plate absorbs the contact-sensitive specimen, such as a battery film, onto the plate surface for more stable measurement.

Mitutoyo America provides vacuum plate packages as well as custom made solutions.
 Optional set 02AZE375 enables the application of up to 10 intermediate forces.
 Data export to MeasurLink<sup>®</sup> and MS Excel.

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Vacuum Off



Adaps

318-221A + 64PKA297



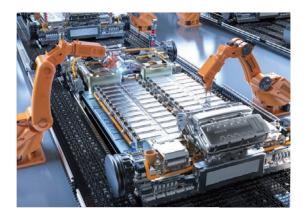
ode	Model	Test Force*	List	Promo
318-221A	VL-50-B	0.01N	\$9,710.00	\$8,739.00
measuring le Repeatability	ngth (mm) up to 0.05 µ	m	+L/100) µm L=a h Vacuum Pack	

#### Separate Type Litematic Main Unit

Code	Model	Test Force*	List	Promo
318-226A	VL-50S-B	0.01N	\$9,710.00	\$8,739.00
957460	Granite Stand		\$5,010.00	\$4,509.00

 Measuring accuracy (20°C) up to (0.5+L/100) µm L=arbitrary measuring length (mm)
 Repeatability up to 0.05 µm
 \*The ceramic ball contact included with Vacuum Packages will add 0.03N







Vacuum Packa	-	11-4	Duomoo
Code	Model	List	Promo
64PKA297	50x50mm Vacuum Package	\$4,300.00	\$3,870.00
K543722	Laser activated Vacuum Package	\$9,350.00	\$8,415.00
)			

# EJ Series Industrial interface-mounted compact counter

#### Compact size and easy to use

Up to 8 compact counters (EJ counters) can be linked providing the capacity to connect up to 16 gages. On a DIN rail, each unit can be connected directly without using cables, so it takes up minimal space. All linked units and gages can be driven by a single power source.

#### EtherNet/IP, CC-Link, PROFINET, EtherCAT or USB Connection

Data can be output through an industrial interface by linking a compact counter (EJ counter) with an interface unit. Constant data monitoring and positional management are performed. A USB interface is also provided for easy connection with a computer. Note: The range of interfaces is set to be expanded in the near future.

#### **Calculation function**

Enables sum difference operations between 2 gages connected to the same counter. Functions such as tolerance judgment and peak hold are also included.

### Linear Gage LG100 Series



Order No	Description	List	Promo
542-190	LG100-110, Range: .4"/10mm, Res: .00005"/1µm	\$630.00	\$598.50
542-193	LG100-125, Range: 1"/25mm, Res: .00005"/1µm	\$803.00	\$762.85
542-196	LG100-150, Range: 2"/50mm, Res: .00005"/1µm	\$973.00	\$924.35
542-191	LG100-0510, Range: .4"/10mm, Res: .00002"/0.5µm	\$687.00	\$652.65
542-194	LG100-0525, Range: 1"/25mm, Res: .00002"/0.5µm	\$860.00	\$817.00
542-197	LG100-0550, Range: 2"/50mm, Res: .00002"/0.5µm	\$1,030.00	\$978.50
542-192	LG100-0110, Range: .4"/10mm, Res: 5µinch/0.1µm	\$745.00	\$707.75
542-195	LG100-0125, Range: 1"/25mm, Res: 5µinch/0.1µm	\$917.00	\$871.15

### Linear Gage LG200 Series

542-186/54	42-187/542-188 🔍 🗰 🕅 Mitutoyo Liseoco 🧶 G		<b>J</b> 67 <b>G</b>
Order No	Description	List	Promo
542-188	LG200-0110, Range: 0.4"/10mm, Res:.00005"/ 0.1µm	\$838.00	\$754.20
542-187	LG200-0510, Range: 0.4"/10mm, Res:.00002"/ 0.5µm	\$783.00	\$704.70
542-186	LG200-110, Range: 0.4"/10mm, Res:.00005"/ 1µm	\$727.00	\$654.30





Order No	Description	List	Promo
542-081	Main EJ Module Counter	\$545.00	\$517.75
542-081A	Main EJ Module w/AC Components	\$630.00	\$598.50
21HZA149	USB only interface	\$400.00	\$380.00
21HZA186	CC-Link Module (Mitsubishi), and USB	\$888.00	\$843.60
21HZA187	PROFITNET Module	\$888.00	\$843.60
21HZA188	EtherNet/IP Module	\$922.00	\$875.90
21HZA264	EtherCat Module	\$884.00	\$839.80

#### High accuracy

Precision and accuracy demanded by the automated assembly and inspection markets, are guaranteed. Due to our expertise as a manufacturer of measuring instruments, repeatability in the full measurement range ( $2\sigma$ ) and narrow-range precision are also guaranteed.

#### **Environment resistance**

Sliding durability of more than 50 million cycles\*, with protection level of IP67G. A highly oil-resistant material is used in the rubber cap and cable sheath, so it can be used even in harsh environments. \* 10 mm range models (Actual value from in-house tests)

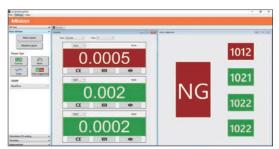
#### Reference point detection (LG100 Series)

Reference point signal output functions are featured throughout this series. When incorporating into a device the master setting value is easy to set and is retained after shutdown.

### LG QuickSetup Tool

A configuration tool is FREE for use with the EJ counter when connected via the optional USB interface. Multiple settings normally carried out with counter operating keys can now be easily applied from a computer. Live displays allow for easily viewing gage positions or measurements at a glance.

Note: This software can be used free of charge and downloaded from the Mitutoyo website. https://www.mitutoyo.co.jp/eng/contact/products/lg/



>ABS encoder.

Order No.

053906B

as with standard models.

position from the origin point.

**Digimatic Quill Kit** 

Easy Installation, Fits Most Vertical Knee Mills

> Easy-to-read LCD with resolution of .0005"/0.01mm. 0-6" travel.

> Powered by a single SR-44 Battery which lasts about 1 year with normal use. > SPC Output for data transmission to data processors or a remote display.

Data Management Soft

**MeasurLink**<sup>®</sup> ENABLED

> Push-button controls for inch/mm, Zero-Set and On/Off.

Description Digimatic Quill Kit complete with

brackets & scale for Bridgeport Type

machines.

**ABSOLUTE Digimatic Scale Units** 

# **Digimatic Scales**

# Linear Encoders for Lathes, Grinders, and Mills

## **Mitutoyo Digital Readout Packages**

Mounting Hardware Included on all machine retrofit packages



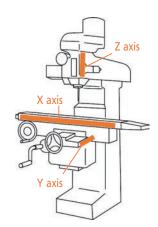


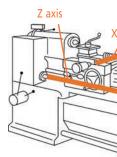
### All DRO Packages Include:

>KA-200 Counter tray/arm kit > High Resolution Linear Scales (down to .0001" or better!) > Bracket Kit(s)

Package Part No.	Description	X Travel	Y Travel	Z Travel	X Axis Type	Y Axis Type	Z Axis Type	List	Promo
64PKA058B	12" X 30" DRO Mill Package	30″	12″		AT715	AT715		\$1,640.00	\$1,440.00
64PKA059B	12" X 36" DRO Mill Package	36″	12″		AT715	AT715		\$1,710.00	\$1,510.00
64PKA060A	14" X 30" DRO Mill Package	30″	14″		AT715	AT715		\$1,710.00	\$1,510.00
64PKA062B	16" X 36" DRO Mill Package	36″	16″		AT715	AT715		\$1,710.00	\$1,510.00
64PKA063A	16" X 40" DRO Mill Package	40″	16″		AT715	AT715		\$1,710.00	\$1,510.00
64PKA035A	6" X 28" Lathe Package	6″		28″	AT116		AT715	\$1,660.00	\$1,460.00
64PKA039A	8" X 40" Lathe Package	8″		40″	AT116		AT715	\$1,660.00	\$1,460.00
64PKA042A	10" X 40" Lathe Package	10″		40″	AT116		AT715	\$1,660.00	\$1,460.00
64PKA046A	12" X 40" Lathe Package	12″		40″	AT116		AT715	\$1,660.00	\$1,460.00
64PKA050A	12" X 60" Lathe Package	12″		60″	AT116		AT715	\$1,890.00	\$1,690.00
64PKA052A	14" X 40" Lathe Package	14″		40″	AT116		AT715	\$1,660.00	\$1,460.00
64PKA057A	16" X 60" Lathe Package	16″		60″	AT116		AT715	\$1,890.00	\$1,690.00
64PKA026A	6" X 12" Grinder Package	6″		12″	AT116		AT116	\$1,850.00	\$1,650.00
64PKA028A	8" X 12" Grinder Package	8″		12″	AT116		AT116	\$1,850.00	\$1,650.00
64PKA029A	8" X 14" Grinder Package	8″		14″	AT116		AT116	\$1,850.00	\$1,650.00

Other packages and kits are available for mills, lathes, grinders and custom machines and applications. Contact your local distributor for details.





>KA-200 Counter

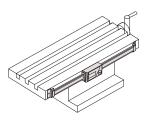
>Horizontal or vertical face according to the scale mounting direction. SPC > Multi-function types with diameter displaying function are also available for lathes. (Contact Mitutoyo.) >All units come with two mounting brackets, each located at either end of the scale. ABSOLUTE Promo Туре .0005" / 0.01mm | Horizontal single-function | \$269.00 \$255.55

#### >With SPC data output. Order No Model Accuracy Resolution Range 572-210-30 SD-4"DX 0-4" / 0-100mm .001" / 0.03mm 572-211-30 SD-6"DX 0-6" / 0-150mm .001" / 0.03mm 0.0005" / 0.01mm Horizontal single-function \$285.00

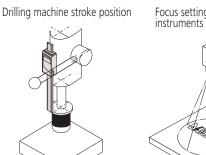
						5		
572	-212-30	SD-8"DX	0-8" / 0-200mm	.001″ / 0.03mm	.0005″ / 0.01mm	Horizontal single-function	\$332.00	\$315.40
572	-213-10	SD-12"D	0-12" / 0-300mm	.002" / 0.04mm	.0005″ / 0.01mm	Horizontal single-function	\$641.00	\$608.95
572	-310-10	SDV-6"D	0-4" / 0-100mm	.001" / 0.03mm	.0005" / 0.01mm	Vertical single function	\$298.00	\$283.10
572	-311-10	SDV-6"D	0-6" / 0-150mm	.001″ / 0.03mm	.0005" / 0.01mm	Vertical single-function	\$316.00	\$300.20
572	-312-10	SDV-8"D	0-8" / 0-200mm	.001" / 0.03mm	.0005" / 0.01mm	Vertical single function	\$367.00	\$348.65
572	-313-10	SDV-12"D	0-12" / 0-300mm	.002" / 0.04mm	.0005" / 0.01mm	Vertical single function	\$705.00	\$669.75

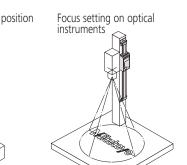
#### **Applications**

Machine table position



Prices effective March 15, 2024 through June 28, 2024





SPC ABSOLUTE

\$338.20

\$356.00

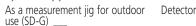
> The Origin key allows setting of an absolute zero point to be used as reference in subsequent measurements.

> The Zero/ABS key allows the display to be zero-set at any slider position along the beam for incremental comparison measurements. This key will also allow return to the absolute coordinate with a display of the true

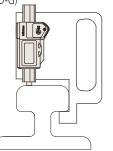
Once set, the ABS Digimatic Scale Unit is ready to show its true position whenever turned on, rather than 0.00"

>No rack, no pinion, no glass scale. Digimatic scale unit is safely embedded in the hardened stainless steel blade.

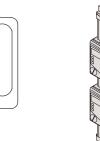
Special Applications



\$270.75



Detector head mechanism



MeasurLink<sup>®</sup> ENABLED

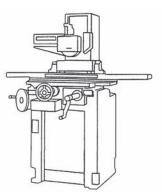
1012 0005 99464





#### **MeasurLink**<sup>®</sup> ENABLED







# Hardness Testers

# Hardness Testers

## **Rockwell and Rockwell Superficial Hardness Tester**

With Real-Time Electronic Test Force Control

- > Closed-loop control of testing forces.
- > Initial and Total test forces (loads) are applied with unparalleled accuracy and repeatability.
- > Extended indenter arm reaches inside diameters and hard-to-reach surfaces at eye level, allowing the operator to easily see where the indenter accesses small or hard-to-reach parts.
- > Automatic cycle start after initial set point is reached.
- >Continuous test mode for automatic testing of all like sized parts.
- > All hardness parameters set automatically via the touch screen.
- > Cylindrical and spherical surface corrections.
- > Auto conversion to most common hardness scales or tensil strength



Model No.		810-233-33A 810-333-33A				
Order No.		HR-530 HR-530L				
Hardness testing	methods	Rockwell / Rockwell Superficial / Brinell / Plastics Hardness				
Initial Test Force		29.42 N (3kgf),	98.07 N (10kgf)			
	Superficial	147.1 N (15kgf), 294.2 N	I (30kgf), 441.3 M (45kgf)			
(11)	Rockwell	588.4 N (60kgf), 980.7 N	l (100kgf), 1471 N (150kgf)			
Test Force (N)	Light Force Brinell	(30kgf), 306.5 N (31.25kgf), 612.9 N (62	2 N (15.625kgf), 245.2 N (25kgf), 294.2 N .5kgf), 980.7 N (100kgf), 1226 N (125kgf), (187.5kgf)			
Test Force Contro	t Force Control Automatic (load / hold / unload)					
Maximum Speciment Size		Height: 9.8" (250mm) Height: 15.5" (395mm) Depth: 5.9" (150mm) Depth: 5.9" (150mm)				
External Data Ou	ıtput	RS-232C, dig	imatic, USB2.0			
External	Main Unit	9.84" x 26.38" x 23.82" (250 w x 667 d x 621 h mm)	11.6" x 26.2" x 30.1" (300 w x 667 d x 766 h mm)			
Dimensions	Touch-Panel Display	191 w x 147 d x 71 h mm (Color)				
Mass		Approx. 60 kg	Approx. 69 kg			
	List	\$16,600.00	\$20,000.00			
	Promo	\$14,940.00	\$18,000.00			



For more information regarding compatible accessories such as fixtures, indenters, and calibration blocks use the QR Code!



Data Management Software by Mitutov

#### ASTM Compliant HR Series Rockwell and Superficial Hardness Tester Packages Include:

> Certified Blocks an Indenters C and N Scale Indenter > 1/16" Carbide Ball Indenter > HRC30 Rockwell Test Block

> HRC63 Rockwell Test Block >HRBW95 Rockwell Test Block > HR30N60 Rockwell Test Block > HR30TW70 Rockwell Test Block

Calibration Set									
Order No.	Order No.	Order No.	Order No.						
64HAA462	64HAA463	64HAA464	64HAA465						
HRC Scale	HRBW Scale	HR30N Scale	HR30TW Scale						
Test Blocks	Test Blocks	Test Blocks	Test Blocks						
64HAA181	64HAA172	64HAA270	64HAA303						
64HAA177	64HAA170	64HAA266	64HAA301						
64HAA173	64HAA168	64HAA262	64HAA299						
	Universal Style Indenter with Flat								
64HAA100	64HAA119	64HAA101	64HAA119						

> Certificate stating conformance to ASTM E 18

10%

OFF

10% off all

Packages ┿

Free Shipping

Installation & Calibration Include

HR-530L 810-333-33A

> Mitutoyo Installation and A2LA Calibration

\*HR-430MR includes only diamond indenter. C scale indenter, HRC and HRBW blocks listed above\*

## A Complete Line of ASTM Compliant Rockwell Hardness Testing Machines





	HR-320MS	HR-430MR	HR-430MS	HR-530/HR-530L	HR-610A/HR-620A	HR-620B
Rockwell Scales		X				
Rockell and Superficial	Х		Х	Х	Х	Х
Dead Weight	Х	Х	х			
Individual Hanging Weights	Х					
Dial Weight		Х	Х			
Automatic break		Х	Х			
Closed Loop				Х	Х	Х
Digital Display	Х	Х	Х	Х	Х	Х
7.1" Max Sample Height	Х	Х	Х			
9.8" Max Sample Height				HR-530	Х	Х
15.5" Max Sample Height				HR-530L		
6.5" Max Depth	Х	Х	Х			
5.9" Max Depth						
8.6" Max Depth				Х	Х	Х
CNC						Х
Motorized X Stage (Optional)					Х	Х
Motorized Y Stage						Х
Software Control and Analysis						Х
ASTM Compliant HR Series Rockwell & Rockwell Superficial Packages - All 10% Off	810-192-31A	810-193-21A	810-194-31A	810-233-33A (HR530) or 810-333- 33A (HR530L)	810-512-23A (HR610A) or 810-522-23A (HR620A)	810-527-21A
List	\$10,900.00	\$11,100.00	\$11,600.00	\$16,600.00 / \$20,000.00	\$28,100.00 / \$30,400.00	\$48,800.00
Promo	\$9,810.00	\$9,990.00	\$10,440.00	\$14,940.00 / \$18,000.00	\$25,290.00 / \$27,360.00	\$43,920.00

# Hand Tool Hardness

## **Durometers (Digital and Analog)**

For Rubber and Plastic Hardness Testing

Order No	Model	Scale	Display	Graduation	Range	
811-335-10	HH-335	Shore A	Analog	1.0	10~90	
811-336-10	HH-336	Shore A	Digital	0.5	10~90	
811-337-10	HH-337	Shore D	Analog	1.0	20~90	
811-338-10	HH-338	Shore D	Digital	0.5	20~90	

### HH-411 Hardmatic

Rebound Leeb portable hardness tester featuring reproducibility and ease of operation on large parts. It is lightweight and can be carried into the shop or out in the field.

Order No.	Туре	List	Promo
810-298-10	HH-411 Hardmatic	\$4,580.00	\$4,122.00

Prices effective March 15, 2024 through June 28, 2024

Scan to Unlock the Power of Hardness Testing – Elevate Your Quality Control Today!



# Mitutoy/o











**MeasurLink** ENABLE



### Micro Vickers Hardness Testers - HM Series

Mitutoyo = SHIPPING 10% off all Hardness Testers!

- > HM Type A systems include a built-in measuring eyepieces for indentation analysis and accurate workpiece positioning
- > Automatic Turret (Touch-screen controlled in Type A systems and software controlled via AVPAK in Type B and D systems)
- > Test force range 10g-1000g (HM-210) and .05-2000g (HM-220)
- >LED illumination
- **10% OFF ALL HARDNESS TESTERS!**

Functions	System A	System B	System D
Focusing	Manual	Manual	Automatic
Testing Action	Single Point	Single Point	Pattern Specific
Test-point Positioning	Manual X-Y Stage	Manual X-Y Stage	Automatic X-Y Stage
Measuring Indentations	Manual Monoscope	Automatic by AVPAK	Automatic by AVPAK
Camera (for observing and measuring indentations)	600,000 pixels B&W*	Color, 3 million pixels	Color, 3 million pixels
Operating the main unit	Touchel Panel	PC**	PC**
Order No	64AAB305PA	64AAB323PA	64AAB380PA
Main Unit	HM-210A	HM-210B	HM210D
List	\$24,000.00	\$41,200.00	\$71,100.00
Promo	\$21,000.00	\$37,080.00	\$63,990.00

\*\* PC sold separately

### **Heavy Load Hardness Testers - HV Series**

#### Highly Versatile Basic Model

#### HV-110/120 System A

> Equipped with a high performance motorized test force selection function and motorized turret mounts.

- > Operates as smoothly as electric models but with the certainty of traditional test forces.
- >A List function make it easy to perform multi-point and average hardness evaluations, which required extra effort or external data processors with conventional manual models. This convenient screen enables consistency of test results.

> Motorized test force selection and motorized turret positions can be easily controlled via a touch screen control panel. Adjustable X-Y stage with built-in digital micrometers for detailed measurement analysis

HV-110/120 System B,C,D

reducing reading variation and visual error.

multiple work piece analysis now carried out automatically.

> D series testers add Auto Focus and create a fully automatic system that

dramatically shortens the cycle time of your test and indentation analysis!

Advanced models promise additional productivity improvements

B,C and D series testers feature AVPAK dedicated image software enabling automatic indentation reading with excellent automatic edge detection capability,

> C and D series testers add powered X-Y stages which enable automatic continuous testing. This allows extended multi-point testing, complex pattern creation and



Prices effective March 15, 2024 through June 28, 2024

#### > Type B and D systems include a camera for software analysis (Type A systems can use optional camera for digital imagery)

> Type A and B systems use micrometer controlled adjustable stages and Type D systems utilize a motorized XY Stage



10% off all

Packages

10%

OFF

**MeasurLink**<sup>®</sup>ENABLED

Connect with your local representative by making an inquiry today!

Hardness Testers



To set up a demonstration or get more information



# Laser Scan Micrometers

### **Ultra-High Accuracy**

Laser Scan Micrometer LSM-6902H

**MeasurLink**<sup>®</sup> ENABLED

- >Improved narrow range Repeatability of 0.03µm / 1.2µin
- > The best repeatability available in the 25mm/1" class.
- > The ultra-precise scanning motor enables the highest measurement accuracy.
- > Thanks to excellent linearity, an accuracy of  $\pm 0.5 \mu m$  over the entire measuring range and a higher accuracy of  $\pm (0.3+0.1 \Delta D) \mu m$  over a narrow range are guaranteed.
- > An excellent option for measuring pin gages or plug gages.



Order No	Range	Resolution	List	Promo
544-499-1A	.004" - 1.0"/0.1mm - 25mm	.000001"0005"/0.00001 - 0.01mm	\$13,900.00	\$12,510.00
544-116-1A	.020" - 2.36"/0.5mm - 60mm	.000002"005"/0.00005 - 0.1mm	\$10,200.00	\$9,180.00

QUICKTOOL\* is free downloadable software that makes programming the LSM-6200 guick and easy. \*For use with customer-supplied PC and optional RS-232C cable.

### High-Accuracy Non-Contact Measuring Systems

> Excellent linearity: down to +/- 0.3 micron.

> High-speed scanning capable: 3,200 scans per second.

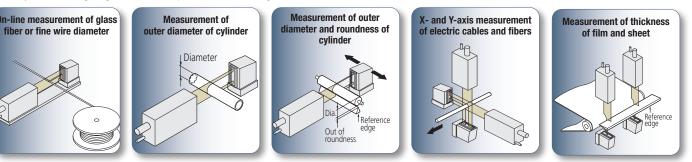
> Various ranges available for selecting the best laser for your application. > Statistical calculation mode.

> Memory function has been increased to allow storage of up to 100 programs. QUICKTOOL\* is free downloadable software that makes programming the LSM-6200 guick and easy. \*For use with customer-supplied PC and optional RS-232C cable.

**MeasurLink**<sup>®</sup>ENABLED Data Management Software by

			-					
Order No	Model	Range Inch	Range mm	Repeatability	Linearity	Scanning Rate	List	Promo
64PKA117	LSM-500S	.0002"08"	0.005~2mm	±0.03µm	±0.3µm	3,200 scans/sec	\$11,900.00	\$8,092.00
64PKA118	LSM-501S	.002"4"	0.05~10mm	±0.04µm	±0.5µm <b>`</b>	3,200 scans/sec	\$10,700.00	\$6,955.00
64PKA119	LSM-503S	.012" - 1.18"	0.3~30mm	±0.11µm	±1.0µm <b>`</b>	3,200 scans/sec	\$11,600.00	\$7,888.00
64PKA120	LSM-506S	.04" - 2.36"	1~60mm	±0.36µm	±3µm'	3,200 scans/sec	\$13,200.00	\$9,372.00
64PKA121	LSM-512S	.04" - 4.72"	1~120mm	±0.85µm	±6µm'	3,200 scans/sec	\$20,300.00	\$16,443.00
64PKA122	LSM-516S	.04" - 6.30"	1~160mm	±1.4µm	±7µm'	3,200 scans/sec	\$32,600.00	\$28,688.00

<sup>2</sup> Linearity over entire range. Higher accuracies are possible over smaller ranges.



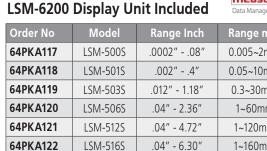
please use the QR code.





Seamless assistance is a scan away -





# Mitutoy/o

🗋 SCAN M



#### Bench Top Laser Scan Micrometer LSM-9506

- Integrated display and measuring unit in one unit.
- > Statistical calculation mode.
- >RS-232C output, I/O interface, and SPC output interface are standard.





## **UP TO 35% OFF**!





# Microscopes

# Microscopes

### MF Measuring Microscopes with Metlogix M2 Software and **Touch-Screen Tablet**

Featuring M2 geometric measuring display

- > Highest measuring accuracy in its class
- > Stage travel range up to 400mm x 200mm / 16in x 8in
- >Quick release mechanism and zero-set buttons on stage controls increase operability when working larger workpieces
- > Easy to use all-in-one PC Touch Screen Display
- >M2 Geometric 2D Measurement Software
- > Camera port is standard on all models
- > Wide range of objectives available from 1x to 100x
- >M2 Retrofit package available for D generation MF and MF-U microscopes
- > Microscope packages with M2 software and tablet are listed below



Order No	Description	List	Promo	Da
176-861-10PK1	MF-A1010, LED, MONOCULAR TUBE, WITH M2 SYSTEM	\$22,400.00	\$20,160.00	Wa
176-861-10PK2	MF-A1010, LED, BINOCULAR TUBE, WITH M2 SYSTEM	\$23,500.00	\$21,150.00	Sc
176-863-10PK1	MF-A2017, LED, MONOCULAR TUBE, WITH M2 SYSTEM	\$29,200.00	\$26,280.00	yo
176-863-10PK2	MF-A2017, LED, BINOCULAR TUBE, WITH M2 SYSTEM	\$30,400.00	\$27,360.00	
64PKA234	M2 Retrofit Kit for MF / MF-U Microscopes M2 2D Data Procesing Unite with software and hardware, including a tablet PC. This package includes on-site installation and calibration for customers with existing MF of MF-U Microcopes	\$4,300.00	\$3,870.00	

## **MF-U Measuring Microscopes**

>Measuring accuracy that is highest in its class (and conforms to JIS B 7153) > Compatible with both brightfield and darkfield objective lenses >Manual or motorized turrets available dependent on model >Compatible with M2 retrofit Kit

Model No. (XY stage size)	MF-UA2010D			
XY stage travel range	8 x 4" / 200 x 100mm			
Z-axis travel range	6" / 150mm			
Focusing method	Manual focusing (Coarse focusing: 30mm/rev., Fine focusing: 0.2mm/rev.)			
Measurement method	Linear encoder (2-axis model: X / Y-axis)			
Resolution (switchable)	.0001" / .00005" / .00001" (0.001mm / 0.0005mm / 0.0001mm)			
Measuring accuracy (at 20°C)	XY-axis: (2.2+0.02L)µm, L = Measuring length (mm) when not loaded, JIS B 7153			
Floating function	X and Y axes with Quick-release mechanism			
XY stage top size	13.78 x 11.02" / 350 x 280 mm			
Effective glass size	9.84 x 5.09" / 250 x 150 mm			
Max. stage loading	22lbs / 10kg			
Max. workpiece height	6" / 150mm			



To learn more about our MF and MF-U Microscopes please visit our webpage.



## TM Toolmakers' Microscopes

- > Adjustable illumination intensity.
  - > Angle measurement is performed easily by turning the angle scale disc to align the cross-hair reticle with the workpiece image.
  - > Includes standard accessories create an overall magnification of 30X. Magnifications can be changed from 20 - 200X by using optional objectives and/or eyepieces.
  - >.000050" Resolution Digimatic micrometer heads included.

Model No.		TM-A505B	TM-A1005B			
Order No.		176-820A	176-821A			
Eyepiece		Standard accessory: 15X (field number: 13), Options: 10X, 20X				
Objective lens		Standard accessory: 2	2X, Options: 5X, 10X			
Microscope head	Maximum height of workpiece	4.53" / 115mm	4.21" / 107mm			
Illumination unit	Transmitted illumination	Stepless brightness adjustment, White LED light source, with green filter				
	Surface illumination	Oblique single-source type, Stepless brightness adjustment, White LED light source				
Cross-travel stage	Measuring range	2" x 2" / 50×50mm	4" x 2" / 100x50mm (An optional 2"/50mm gage block is required to cover full range. A CERA block is recommended.)			
	Usable area of the stage glass	3.8" x 3.8" / 96×96mm	6" x 3.8" / 154×96mm			
	Maximum stage glass loading	11 lbs. / 5kg				
Linear measurement method		Micrometer heads included				
List		\$6,410.00	\$8,350.00			
	Promo	\$5,769.00	\$7,515.00			

Model Order No.

Optical tube

Evepiece

Objective

Total magnification

Working distance

Field of view

Dimensions Mass

## Trinocular Stereo Microscope MSM-414TL

- >Continuous 1X 4X magnification.
- > Image always in focus throughout zoom range.
- > Crisp, erect images with high resolution and excellent stereoscopic effect.
- > Stereo-tube can be rotated a full 360° for viewing at any angle.
- > Bilateral zoom control knob adds convenience and increases operator efficiency.
- > Diopter adjustment for both eyepieces.

Order No.	Description	List	Promo					
Stereo Microscope Unit								
377-974A MSM-414TL Stereo Microscope \$1,580.00 \$1,4								
Observational Camera Accessories								
377-481	C-mount Video Adapter for MSM-414TL	\$59.35						
64PMI252	MOTI-CAM 4000, 8 MEGAPIXEL, 1/1.8" CMOS , USB/HDMI	\$1,650.00						

377-481 and 64PMI252 purchased separately\*

Prices effective March 15, 2024 through June 28, 2024



# **MeasurLink**<sup>®</sup>ENABLED

ant to take a closer look? an the QR code to make our product inquiry today!

> 陳滿音 SCAN ME





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# **Mitutoy**<sub>0</sub>



### **MeasurLink**<sup>®</sup> ENABLED



Newly designed LED illumination



Modular MOTICAM accessory for seamless image documentation



Order No.	Description
64PMI247	MOTICAM S1, 1.2 MEGAPIXEL-1/3" CMOS, USB
64PMI249	MOTICAM S3, 3.0 MEGAPIXEL-1/2" CMOS, USB
64PMI248	MOTICAM S6, 6.0 MEGAPIXEL-1/1.8" CMOS, USB
64PMI252	MOTI-CAM 4000, 8 MEGAPIXEL, 1/1.8" CMOS , USB/HDMI
63AAA060	.37x C-Mount Eyetube Adapter

MSM-414TL
377-974A
Trinocular
10X - 40X
10X (377-016)
1X - 4X
80mm
20mm - 5mm
H=13.2"x W=6.7"x D=9.3"
13.2 lbs (6kg)



Camera with software for digital viewing



# Digital Microscopes

# Digital Profile Projectors

# Set your sights on advanced vision systems

The Quick Scope series of digital microscopes offer high accuracy, high magnification manual 3D optical measurements.

Mitutoyo Starllation, Calibration & STARTING AT \$33,600.00

### **Quick Scope Digital Microscope Features:**

- > Optimized for Efficiency: High-speed, high-accuracy optical autofocus for 3D measurements, ensuring rapid and precise results
- > Versatile Illumination: Surface, contour, and ring light options cater to a variety of measurement needs
- > Compact and User-Friendly: Reduced footprint with a quick release system for easy stage movement
- > Advanced Technology: 7X optical zoom captures measurement targets clearly, with high-intensity LED lighting to highlight intricate edges
- > Automatic Edge Detection: Increase speed and accuracy with software edge detection
- > Automatic Focus: Measure in full 3D with motorized Z axis focus
- > Automatic Light: Run programs without the need for operators to adjust the light settings
- > Automatic Part Detection: Place parts without fixturing using pattern recognition
- > Model with 16" Table: Measure parts up to 16" in length

#### Packages

Model	Stage Size	Package No.
QS-L2010Z/AFC	8″ x 4″ x 6″	359-713-10PK
QS-L3017Z/AFC	12″ x 6.7″ x 6″	359-714-10PK
QS-L4020Z/AFC	16″ x 8″ x 6″	359-715-10PK

## **Traceability to National Standards**

ORKING STANDARD	WORKING STANDARD	SECONDARY STANDARD	SECONDARY STANDARD	PRIMARY NATIONAL STANDARD
Vision Measurement System (Measuring Accuracy)	Mitutoyo Kawasaki Plant Working Standard	Mitutoyo Utsunomiya Measurement Standards Calibration Center 63nm Practical Stabilized He-Ne Laser Interforemeter (for standard scale)	Mitutoyo America Corporation A2LA Accredited Scope of Accreditation to ISOREC 17025:2005 & ANSINCSI. Z5403-1-1994 & ANSINCSI. Z5403.3-2006	National Institute of Standards and Technology (NIST)



**MeasurLink**<sup>®</sup> ENABLED



#### The Ouick Image series of digital profile projectors offer high accuracy. high speed 2D optical measurements.

#### **Quick Image Digital Profile Projector Features:**

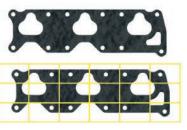
- > Precision at Its Best: Highest level of measuring accuracy within its class, ensuring consistent and reliable results
- > Adaptable Optics: Double-telecentric optics eliminate human error, providing a wide field of view and long focal depth
- > Simplified Operations: One-click tool for multiple measurements and high pixel count color CMOS camera for clarity
- > Robust Construction: Designed to handle workpieces up to 16" in size with a maximum load capacity of 44 lbs and vertical stroke of 4"

- Safety First: Ultra-long working distance of 3.5" ensures safe focusing, even with stepped workpieces
- > Automatic Edge Detection: Increase speed and accuracy with software edge detection
- > Automatic Light: Run programs without the need for operators to adjust the light settings
- > Automatic Part Detection: Place parts without fixturing using pattern recognition
- > Model with 16" Table: Measure parts up to 16" in length

Stitching the Entire View of a Large Workpiece Improves Ease of Operation and Measurement Efficiency

#### **Stitching Function**

A newly developed correction algorithm stitches multiple images together (multiple image-to-image coupling) while maintaining high-accuracy measurements. After a stitching operation, measurement is easily processed without the need to move the stage.





Multiple view-field stitching image

Full (single image) multiple field of view measurement processing and programming

			Manual Stage Model				Motorized Stage Models			
		Model No.	QI-A1010D	QI-A2010D	QI-A2017D	QI-A3017D	QI-A4020D	QI-C2010D	QI-C2017D	QI-C3017D
	0.2x	Order No.	361-850A	361-851A	361-852A	361-853A	361-854A	361-860-11	361-861-11	361-862-11
Mag.		Package No.	361-850APK	361-851APK	361-852APK	361-853APK	361-854APK	361-860-11PK	361-861-11PK	361-862-11PK
	0.5x	Model No.	QI-B1010D	QI-B2010D	QI-B2017D	QI-B3017D	QI-B4020D			
		Order No.	361-855A	361-856A	361-857A	361-858A	361-859A			
Measuring Range (X x Y)			3.94" x 3.94" 100 x100mm	7.87" x 3.94" 200 x 100mm	7.87″ x 6.69″ 200 x 170mm	11.8″ x 6.69″ 300 x 170mm	15.7″ x 7.87″ 400 x 200mm	7.87" x 3.94" 200 x 100mm	7.87" x 3.94" 200 x 170mm	11.8″ x 6.69″ 300 x 170mm
Travel Range (Z axis)		3.94" (100mm)								
Measurement accuracy (E1xy)				÷	ŧ(3.5+0.02L) μm	L: arbitrary meas	suring length (mm	n)		

Prices effective March 15, 2024 through June 28, 2024

# STARTING AT \$31,300.00



Installation, Calibration & Training Included







High-accuracy measurement of a small feature is achieved by the image zoom function

# **ALWAYS THERE. ALWAYS READY.** YOUR DEDICATED SUCCESS TEAM

Our commitment to you extends far beyond the sale. Our new Customer Success team is a testament to our dedication to providing the industry's best products and services.

The very best products are nothing without reliability and support. Our Customer Success team is always there, ready to help by understanding your unique needs and challenges. They are your single point of contact for anything you may need over the lifetime of your product. They are your liaison, leveraging Mitutoyo's vast expertise to provide comprehensive solutions tailored for your business.

No matter what your need may be, you can always pick up the phone and connect directly with your dedicated customer success. With Mitutoyo, it's not just about the industry's best products, it's about a promise of continued partnership, unparalleled support, and a shared journey towards excellence.



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