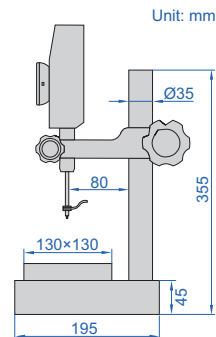
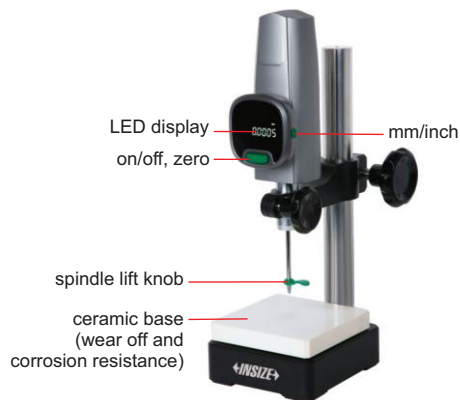




DATA OUTPUT

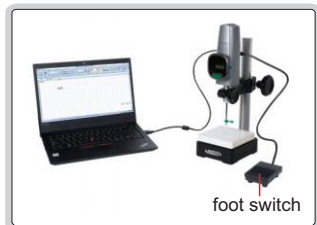
# HIGH PRECISION DIGITAL HEIGHT GAUGES



1155-505

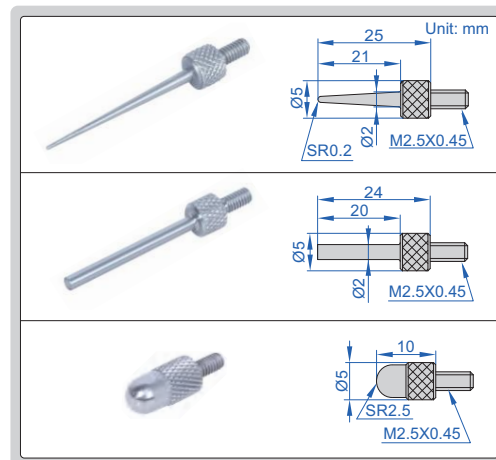


power supplied by charge pal



data transmitted to Excel without software; short press the foot switch to transmit data, long press to zero

measuring tips (included)



- High stability, high precision, high response speed (5000mm/s)
- High brightness LED display
- Ceramic base flatness: 1µm

Code	Range	Resolution	Accuracy (at 20°C)	Measuring force	Output	Power supply
1155-505	0~50mm	0.5µm/0.00002" (can switch to: 1µm/0.00005")	1.5µm	0.8~1.2N	USB	5V/1A (adapter or charge pal)
1155-510	0~50mm	0.1µm/0.000005" (can switch to: 1µm/0.00005")	1µm	0.8~1.2N	USB	5V/1A (adapter or charge pal)

OPTIONAL ACCESSORY

Contact point	code 6282
Charge pal	1155-5-POB
Data output cable (including foot switch)	1155-5-FOS

STANDARD DELIVERY

Main unit	1 pc
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# DIGITAL HEIGHT GAUGES

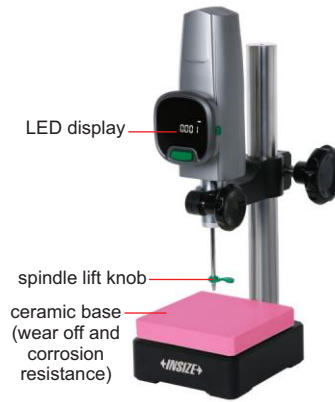
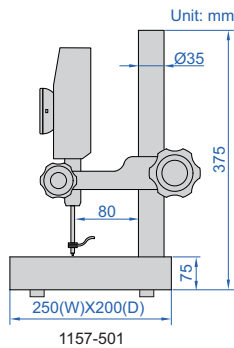
DATA  
OUTPUT



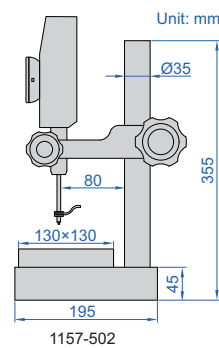
4



1157-501



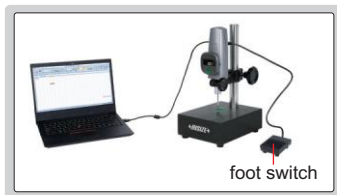
1157-502



- Buttons: on/off, zero, mm/inch, max./min./max.-min.
- High response speed (5000mm/s)
- High brightness LED display

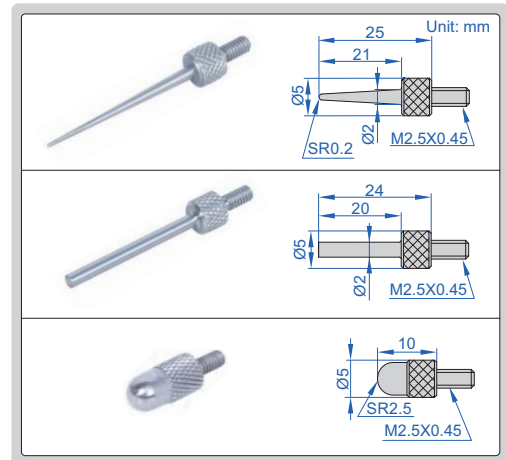


power supplied by charge pal



data transmitted to Excel without software; short press the foot switch to transmit data, long press to zero

measuring tips (included)



Code	Range	Resolution	Accuracy (at 20°C)	Measuring force	Output	Power supply	Base
1157-501	0~50mm	1µm/0.00005"	3µm	0.8~1.2N	USB	5V/1A (adapter or charge pal)	granite (flatness: 2µm)
1157-502	0~50mm	1µm/0.00005"	3µm	0.8~1.2N	USB	5V/1A (adapter or charge pal)	ceramic (flatness: 1µm)

### OPTIONAL ACCESSORY

Contact point	code 6282
Charge pal	1155-5-POB
Data output cable (including foot switch)	1155-5-FOS

### STANDARD DELIVERY

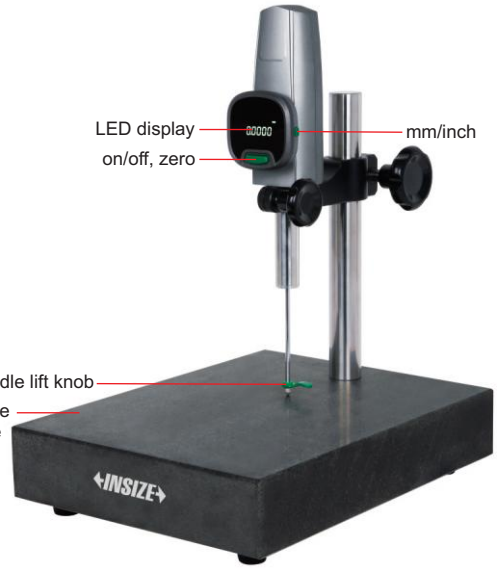
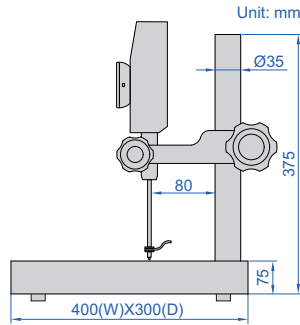
Main unit	1 pc
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DATA OUTPUT

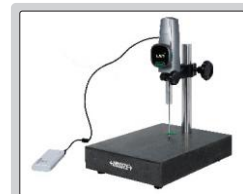
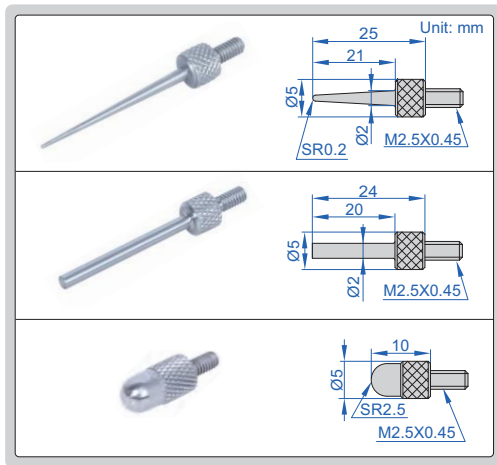
## LARGE RANGE DIGITAL HEIGHT GAUGE

- High stability, high precision, high response speed (5000mm/s)
- High brightness LED display
- Granite base flatness: 3µm



1158-100

measuring tips (included)



power supplied by charge pal



data transmitted to Excel without software; short press the foot switch to transmit data, long press to zero

Code	Range	Resolution	Accuracy (at 20°C)	Measuring force	Output	Power supply
1158-100	0~100mm	0.1µm/0.000005" (can switch to: 1µm/0.00005")	3µm	0.8~1.2N	USB	5V/1A (adapter or charge pal)

### OPTIONAL ACCESSORY

Contact point	code 6282
Charge pal	1155-5-POB
Data output cable (including foot switch)	1155-5-FOS

### STANDARD DELIVERY

Main unit	1 pc
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## DIAL INDICATOR STANDS

REFER TO PAGE 290-298 FOR DETAILS



6862-1001



6864-250T



6867-250

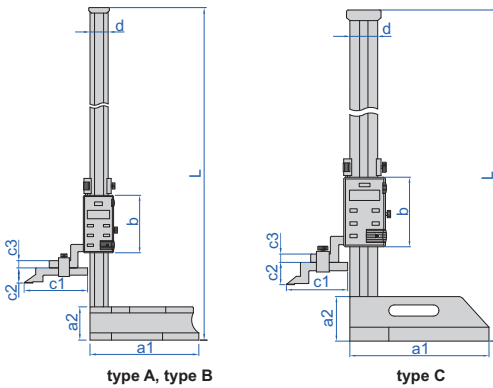
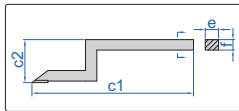
## DIGITAL HEIGHT GAUGES

DATA  
OUTPUT

4

- Non waterproof
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch, ABS/INC, data hold, TOL, set
- ABS/INC is for absolute and incremental measurement
- TOL is for tolerance measurement
- Carbide tipped scriber
- Made of stainless steel (except the base)
- LR44 battery, data output
- Supplied with dial test indicator holder
- Supplied with dust cover (except 1150-1500/2000)
- Optional accessory:
  - wireless transmitter code **7315-1150** (receiver is needed) page 7,
  - data output cable (keyboard format) code **7302-SPC7** page 22,
  - clamp for protractors (code **2372-CLAMP**, for 1150-300)

scriber (included)

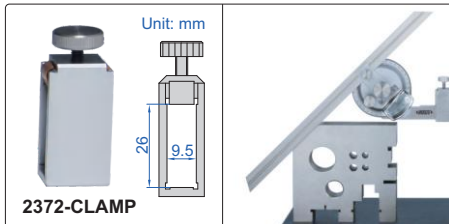


1150-1000

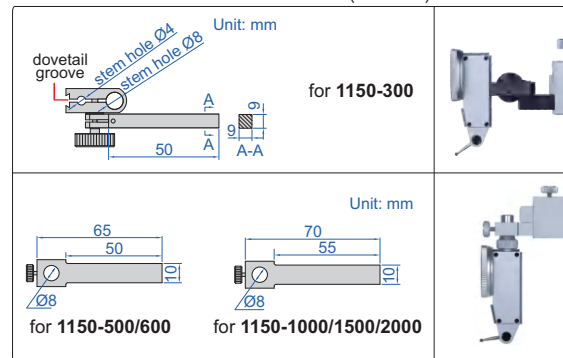
1150-500

1150-300

clamp for protractors (optional)  
for 1150-300



dial test indicator holder (included)



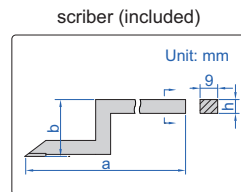
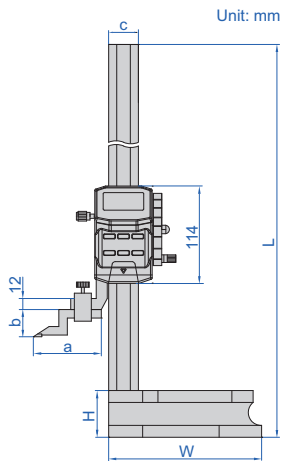
Code	Range	Type	Accuracy	L	a1	a2	b	c1	c2	c3	d	e	f
1150-300	0-300mm/0-12"	A	±0.04mm	485mm	138mm	45mm	95mm	80mm	30mm	10mm	28mm	9mm	9mm
1150-500	0-500mm/0-20"	B	±0.06mm	720mm	180mm	55mm	95mm	103mm	25mm	12mm	30mm	10mm	12mm
1150-600	0-600mm/0-24"	B	±0.06mm	820mm	180mm	55mm	95mm	103mm	25mm	12mm	30mm	10mm	12mm
1150-1000	0-1000mm/0-40"	C	±0.08mm	1275mm	250mm	80mm	125mm	110mm	39mm	15mm	50mm	10mm	15mm
1150-1500	0-1500mm/0-60"	C	±0.12mm	1790mm	280mm	80mm	125mm	110mm	39mm	15mm	50mm	10mm	15mm
1150-2000	0-2000mm/0-80"	C	±0.16mm	2290mm	280mm	80mm	125mm	110mm	39mm	15mm	50mm	10mm	15mm



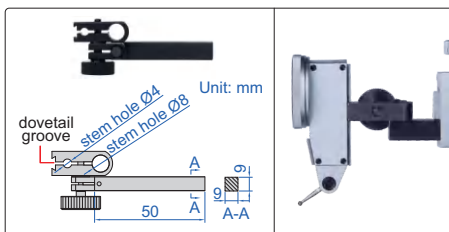
## DIGITAL HEIGHT GAUGES WITH DRIVING WHEEL

4

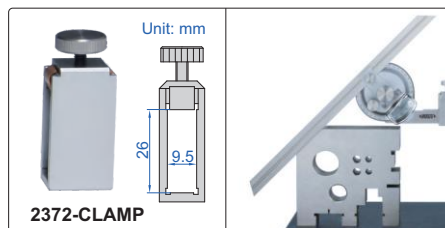
- Non waterproof
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch, preset +, preset -, ABS/INC
- Automatic power off, move the digital unit to turn on power
- Carbide tipped scriber
- Made of stainless steel
- Battery CR2032
- Data output
- Supplied with dust cover
- With dial test indicator holder
- Optional accessory: wireless transmitter code **7315-22** (receiver is needed) page 5, bluetooth transmitter code **7214-22** page 11, data output cable code **7302-22** page 20, clamp for protractors (code **2372-CLAMP**)



dial test indicator holder (included)



clamp for protractors (optional)

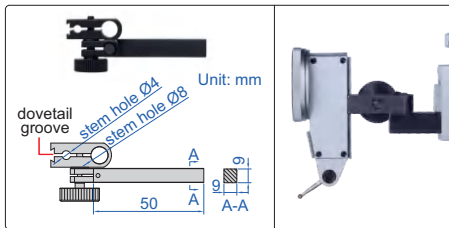


Code	Range	Accuracy	L	W	H	a	b	c	h
<b>1156-300*</b>	0-300mm/0-12"	±0.03mm	515mm	180mm	55mm	80mm	30mm	35mm	9mm
<b>1156-600*</b>	0-600mm/0-24"	±0.05mm	815mm	180mm	55mm	80mm	30mm	35mm	9mm
<b>1156-1000*</b>	0-1000mm/0-40"	±0.07mm	1220mm	265mm	70mm	92mm	48mm	40mm	12mm

\* Supplied with manufacturer inspection certificate

## DIGITAL HEIGHT GAUGES

dial test indicator holder (included)



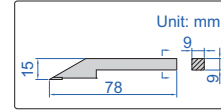
4

- Non waterproof
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch, data hold, ABS/INC, preset
- ABS/INC is for absolute and incremental measurement
- Automatic power off, move the digital unit to turn on power
- Carbide tipped scriber
- Made of stainless steel
- Battery CR2032, data output
- With driving wheel
- With dial test indicator holder
- Supplied with dust cover
- Optional accessory: wireless transmitter code **7315-1151** (receiver is needed) page 8, data output cable code **7302-1151** page 21, clamp for protractors (code **2372-CLAMP**)

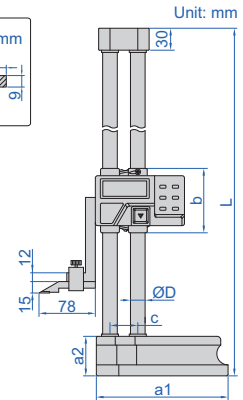


1151-300A

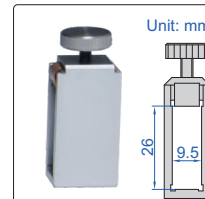
scriber (included)



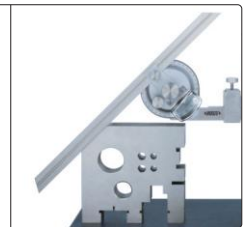
driving wheel on the back



clamp for protractors (optional)



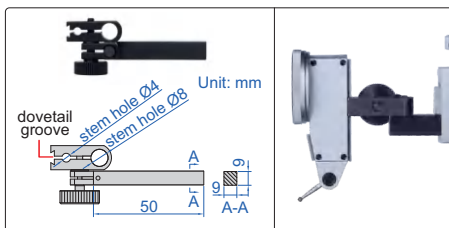
2372-CLAMP



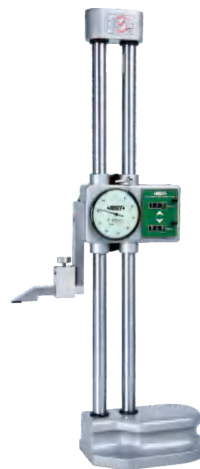
Code	Range	Accuracy	L	a1	a2	b	c	ØD
1151-300A	0-300mm/0-12"	±0.04mm	475	135	43	84	33	15
1151-450A	0-450mm/0-18"	±0.05mm	660	180	54	88	38	20
1151-600A	0-600mm/0-24"	±0.05mm	810	180	54	88	38	20

## DIAL HEIGHT GAUGES

dial test indicator holder (included)

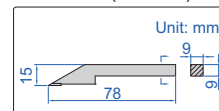


- Dial indicator graduation: 0.01mm
- One counter reads in the plus direction and another in the minus direction, so incremental measurement can be made in either direction
- Carbide tipped scriber
- Made of stainless steel (except the base)
- With driving wheel
- With dial test indicator holder
- Supplied with dust cover
- Optional accessory: clamp for protractors (code **2372-CLAMP**)

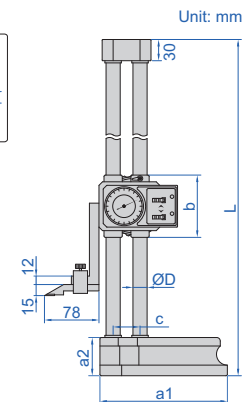


1351-300

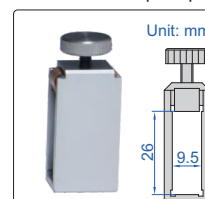
scriber (included)



driving wheel on the back



clamp for protractors (optional)



2372-CLAMP



Code	Range	Accuracy	L	a1	a2	b	c	ØD
1351-300	0-300mm	±0.04mm	475	135	43	84	33	15
1351-450	0-450mm	±0.05mm	660	180	54	88	38	20
1351-600	0-600mm	±0.05mm	810	180	54	88	38	20



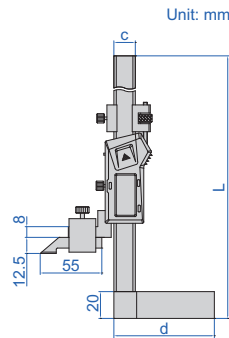
DATA  
OUTPUT

## MINI DIGITAL HEIGHT GAUGES

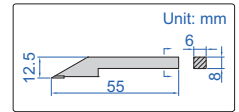
- Non waterproof
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Carbide tipped scriber
- With fine adjustment
- Made of stainless steel
- Battery CR2032
- Optional accessory: dial test indicator holder (code **7151-CL1**)



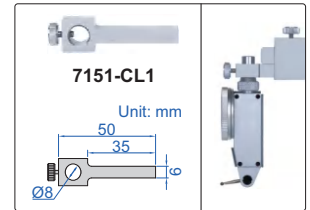
**1154-150**



scraper (included)



dial test indicator holder (optional)



Code	Range	Accuracy	L	c	d	Data output cable (optional)
<b>1154-150</b>	0-150mm/0-6"	±0.03mm	280mm	16mm	75mm	<b>7315-25</b> (receiver is needed) page 5, <b>7214-25</b> page 11, <b>7302-21</b> page 20
<b>1154-200</b>	0-200mm/0-8"	±0.03mm	340mm	20mm	90mm	<b>7315-22</b> (receiver is needed) page 5, <b>7214-22</b> page 11, <b>7302-22</b> page 20

Built-in wireless (receiver code **7315-2/3/6/7/8/9** is needed)

Code	Range	Accuracy	L	c	d
<b>1154-150WL</b>	0-150mm/0-6"	±0.03mm	280mm	16mm	75mm

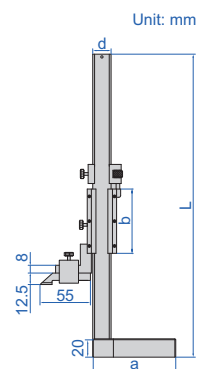
4

## MINI VERNIER HEIGHT GAUGES

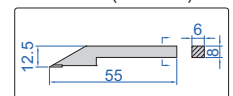
- Graduation: 0.02mm/0.001"
- Carbide tipped scriber
- Made of stainless steel (except the base)
- Satin chrome plated scale
- Optional accessory: dial test indicator holder (code **7151-CL1**)



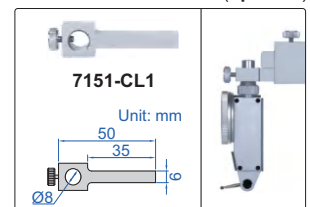
**1253-200**



scraper (included)



dial test indicator holder (optional)

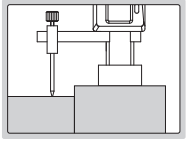


Code	Range	Accuracy	L	a	b	d
<b>1253-150</b>	0-150mm/0-6"	±0.03mm	265	75	57	16
<b>1253-200</b>	0-200mm/0-8"	±0.03mm	325	90	70	20

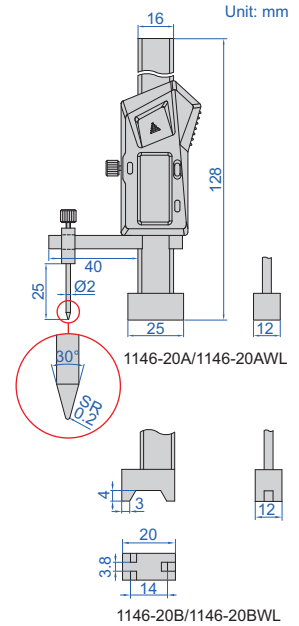
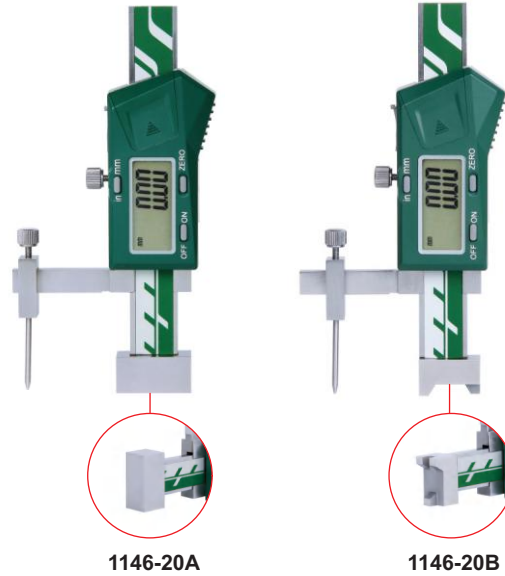
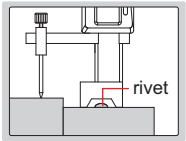
## MINI DIGITAL HEIGHT GAUGES

DATA OUTPUT

application of  
1146-20A/1146-20AWL



application of  
1146-20B/1146-20BWL



- Non waterproof
- Measure height difference of two surfaces (1146-20B, 1146-20BWL suitable for surfaces with barrier, such as rivet)
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Made of stainless steel

With data interface (optional data output cable:  
code 7315-25 receiver is needed page 5,  
7214-25 page 11, 7302-21 page 20)

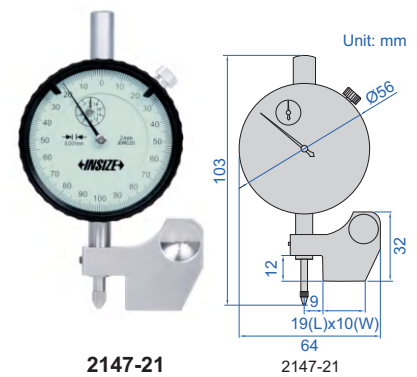
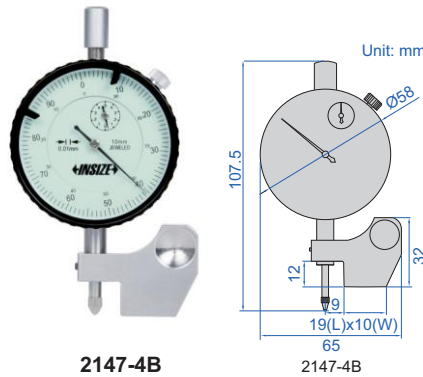
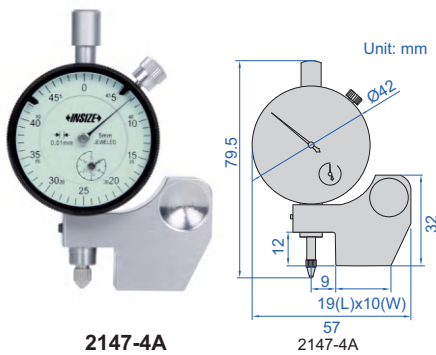
Built-in wireless  
(receiver code 7315-2/3/6/7/8/9 is needed)

Code	Range	Accuracy
1146-20A	0~±20mm/0~±0.8"	±0.02mm
1146-20B	0~±20mm/0~±0.8"	±0.02mm

Code	Range	Accuracy
1146-20AWL	0~±20mm/0~±0.8"	±0.02mm
1146-20BWL	0~±20mm/0~±0.8"	±0.02mm

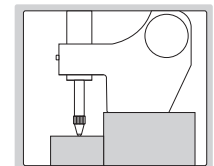
11

## DIAL HEIGHT GAUGES



- Measure height difference of two surfaces

Code	Range	Dial indicator stroke	Dial indicator graduation	Accuracy
2147-4A	0~±5mm (adjustable)	5mm	0.01mm	±0.014mm
2147-4B	0~±5mm	10mm	0.01mm	±0.017mm
2147-21	0~±2mm (adjustable)	2mm	0.001mm	±0.006mm



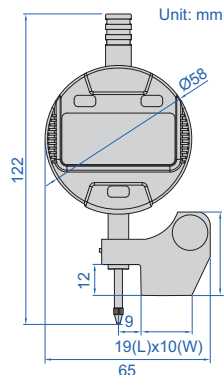


DATA  
OUTPUT

## DIGITAL HEIGHT GAUGES



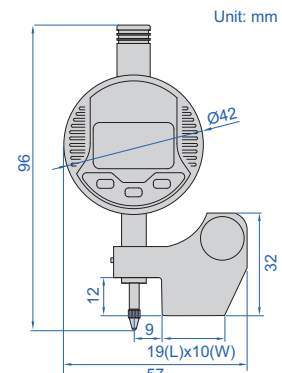
2146-4A



2146-4A  
2146-41A



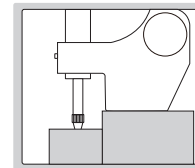
2146-4B



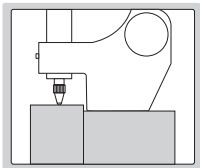
2146-4B  
2146-41B

- Measure height difference of two surfaces
- Button function: on/off, inch/mm, zero, data preset, change measuring direction, absolute/incremental measurement
- Keep preset data in memory after restart
- CR2032 battery, automatic power off (time is adjustable)
- Data output
- Optional accessory:
  - wireless transmitter code **7315-50M** (receiver is needed) page 6,
  - bluetooth transmitter code **7214-50M** page 12,
  - data output cable code **7302-40M** page 21

measure sunked step



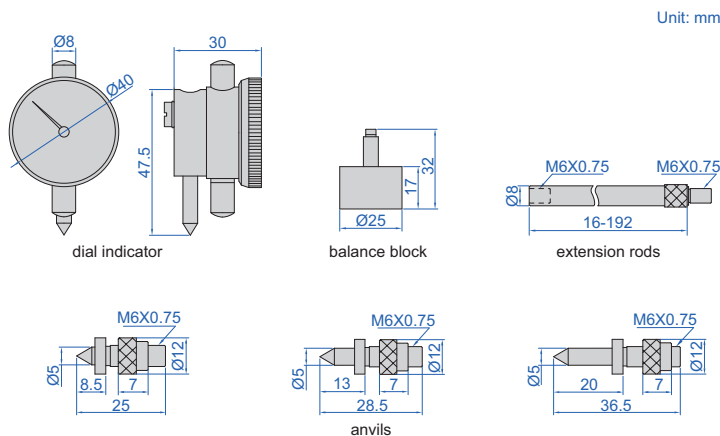
measure raised step



Code	Range (adjustable)	Digital indicator stroke	Digital indicator resolution	Accuracy
2146-4A	0~4mm/0~0.16" (sunked)	12.7mm/0.5"	0.01mm/0.0005"	±0.02mm
2146-41A	0~12.7mm/0~0.5" (raised)	12.7mm/0.5"	0.001mm/0.00005"	±0.005mm
2146-4B	0~4mm/0~0.16" (sunked)	5mm/0.2"	0.01mm/0.0005"	±0.02mm
2146-41B	0~5mm/0~0.2" (raised)	5mm/0.2"	0.001mm/0.00005"	±0.005mm

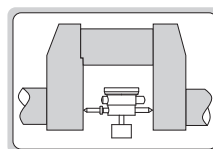
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## CRANKSHAFT TESTERS



2841-500

- To test crankshaft deflection
- The balance block is mounted on the back of dial indicator to keep the dial indicator facing up



Code	Range	Dial indicator range	Graduation	Extension rods	Accuracy
2841-300	60-300mm	3mm	0.01mm	16mm, 32mm, 64mm, 128mm	±0.02mm
2841-500	60-500mm	3mm	0.01mm	16mm, 32mm, 64mm, 96mm, 128mm, 192mm	±0.02mm