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ELECTROMAGNETIC ULTRASONIC THICKNESS GAGE
CODE EMU-S340

VIDEO

- No surface polishing required, can penetrate anti-corrosion coating and rust (maximum 4mm), no coupling agent required
- Normal temperature permanent magnetic probe and high temperature permanent magnetic probe are using weak permanent magnet, to replace the strong permanent magnet commonly used nowadays. Completely solve the problem that EMAT transducer suction force is too large and difficult to move, so that the manual inspection is more simple, convenient and safe
- Temperature compensation function, can input the actual temperature of high-temperature components to automatically compensate the speed of sound, making the thickness measurement value more accurate
- Measurement of non verticality up to ±25°, low verticality requirements for probe placement
- Scanning mode: A-scan format, B-scan image format display of thickness measurement values
- 50000 thickness values and 4000 A-scan or B-scan data can be stored
- Integrated high-brightness LEDs on the back for easy on-site illumination

color LCD

transducer
EMU-S50
(included)

Ød

USB port

SPECIFICATION

Measuring range	1.5~200mm (steel, stainless steel)
Resolution	0.02mm
Accuracy	±0.04mm+H/1000 (H≤50mm) ±0.2mm (50≥H≥100mm) ±0.3mm (100≥H≥200mm)
Working gap (the distance between the probe and the measured object)	normal temperature permanent magnetic probe≤4mm high temperature permanent magnetic probe≤2mm
Minimum required diameter	≥8mm
Non-perpendicularity	±25°
Excitation frequency	3.0MHz~3.9MHz
Material velocity	1000~9999m/s
Adjustment increments	1m/s
Gate function	automatic gate, manual single gate, manual double gate
Display	color LCD, 3.5 inch/320×480 pixel
Interface	USB2.0
Power supply	rechargeable lithium battery, working time≥8 hours
Dimension	195×90×40mm
Weight	820g

normal temperature
permanent magnetic
probe sweep support
EMU-S52 (optional)

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high temperature
permanent magnetic probe
EMU-S51 (optional)

STANDARD DELIVERY

Main unit	1 pc
Transducer EMU-S50	1 pc
Calibration block (diameter Ø36×wall thickness 10mm)	1 pc
4G USB flash disk	1 pc
USB cable	1 pc

OPTIONAL ACCESSORY

High temperature permanent magnetic probe	EMU-S51
Normal temperature permanent magnetic probe sweep support	EMU-S52

SPECIFICATION OF TRANSDUCERS

Code	Magnetism	Magnetic force	Diameter (Ød)	Applicable temperature	Application
EMU-S50 (included)	weak permanent magnet	≤15N	Ø30mm	-10~60°C	general use
EMU-S51 (optional)	weak permanent magnet	≤20N	Ø45mm	-50~800°C	for high temperature

ULTRASONIC THICKNESS GAGE (ADVANCED TYPE) CODE ISU-800D

PENETRATE COATING AND MEASURE THE THICKNESS OF SUBSTRATE

BLUETOOTH

REAL-TIME TEMPERATURE COMPENSATION

DATA OUTPUT

- Real-time temperature compensation eliminates the error caused by temperature variation
- Support both single element transducers and dual element transducers
- Measure the thickness of substrate through coating
- Measuring mode: standard mode (dual element transducer: P-E mode, single element transducer: I-E mode), penetrate coating mode (dual element transducer: I-E mode, single element transducer: E-E mode or auto mode)
- Measure method: single point, scanning, deviation
- Set upper and lower limits for alarm when out-of-tolerance
- Single point and 2 points calibration
- Keyboard lock function avoids parameter setting change caused by unintended press during measurement
- Memory 1000 measurement values
- Data can be transferred to PC by Bluetooth connection or Mini-USB cable

LCD

USB port

4.00mm calibration block

ISU-S15-P06 transducer (included)

Ød

VIDEO

transducer **ISU-S15-P06** (included)

transducer **ISU-S2M-P14** (**optional**)

transducer **ISU-G5M-P10** (**optional**)

transducer **ISU-G5M-P08** (**optional**)

transducer **ISU-G7M-P06** (**optional**)

transducer **ISU-G2M-P12** (**optional**)

transducer **ISU-H3M-P12** (**optional**)

delay block **ISU-S15-P06-CB** (**optional**)

delay block **ISU-S15-P06-CB1** (**optional**)

SPECIFICATION

Measuring range	refer to the specification of transducers
Resolution	0.01mm/0.001mm
Accuracy	refer to the specification of transducers
Data output	bluetooth and USB
Velocity	1~19999m/s
Power supply	3.7V rechargeable lithium battery
Dimension	157×78×37mm
Weight	260g

STANDARD DELIVERY

Main unit	1 pc
Transducer ISU-S15-P06	1 pc
Power adaptor	1 pc
USB cable	1 pc
Couplant	1 bottle

OPTIONAL ACCESSORY

Transducer	refer to the specification of transducers
Couplant (for ISU-H3M-P12)	ISU-HT5-COUPLANT
Thermal printer (with cable)	ISU-800D-PRINTER
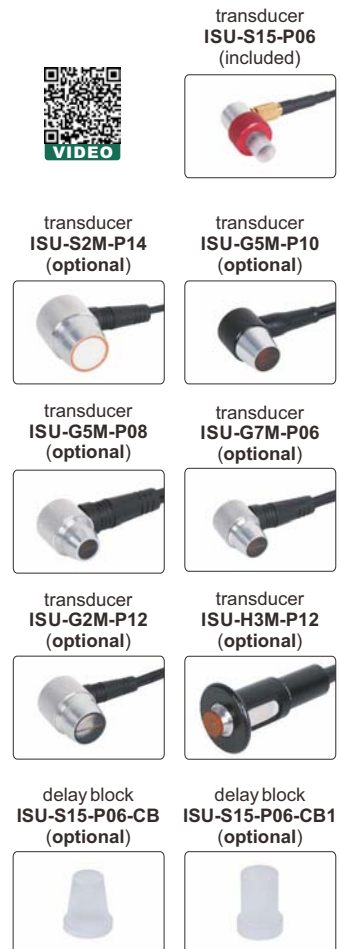
SPECIFICATION OF TRANSDUCERS (ON STEEL)

Code	Type	Freq	Diameter (Ød)	Measuring range	Min. size of pipes (diameter x wall thickness)	Accuracy	Applicable temperature	Application
ISU-S15-P06 (included)	single element	15MHz	8mm	I-E: 0.9~28mm E-E: 0.15~14mm	Ø10x1.5mm Ø15x0.35mm	±0.02mm/0.3%H* (take the larger one)	-10~60°C	high precision or thin workpieces
ISU-S15-P06-CB (optional) **	–	–	5mm	I-E: 0.9~10mm E-E: 0.15~5mm	Ø10x1.2mm Ø15x0.35mm			high precision or irregular surface
ISU-S15-P06-CB1 (optional) **	–	–	8mm	I-E: 0.9~38mm E-E: 0.3~19mm	–			high precision or thick workpieces
ISU-S2M-P14 (optional)	single element	2MHz	19mm	I-E: 30~2000mm E-E: 30~1000mm	–	±0.5%H *	-10~310°C	ultra-thick workpieces
ISU-G5M-P10 (optional)	dual element	5MHz	13mm	0.8~300mm	Ø25x3mm	±0.04mm (range: <10mm) ±H/333mm* (range: ≥10mm)	-10~60°C	normal workpieces
ISU-G5M-P08 (optional)	dual element	5MHz	11mm	0.8~225mm	Ø20x1.2mm			curved surface and normal workpieces
ISU-G7M-P06 (optional)	dual element	7.5MHz	9mm	0.8~50mm	Ø15x1.2mm			curved surface and small workpieces
ISU-G2M-P12 (optional)	dual element	2MHz	17mm	3~700mm	Ø30x4mm	±0.05mm/0.5%H* (take the larger one)		castings and thick workpieces
ISU-H3M-P12 (optional)	dual element	3MHz	15mm	2~200mm	Ø25x3mm	±0.05mm/0.5%H * (take the larger one)	-10~310°C	workpieces with high temperature

* H is the measured thickness in mm
** Delay blockers, suitable for transducer **ISU-S15-P06**

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PENETRATE COATING AND MEASURE THE THICKNESS OF SUBSTRATES

WITH A AND B SCAN

DATA OUTPUT

A scan

B scan

- Measure the thickness of substrate through coating
- Measuring mode: standard mode (dual element transducer: P-E),
  penetrate coating mode (dual element transducer: E-E)
- Dispiay mode: real-time color A-scan waveform mode,
  real-time color B-scan waveform mode,
  thickness value mode, Min/Max capture mode,
  difference or reduction rate mode
- Can measure gray cast iron, ductile iron, PE, PVC pipe, fiberglass,
  3PE anticorrosive layer pipes, metal pipes, pressure vessels,
  shaped parts, wall thickness of small pipes etc
- Set the upper and lower limits, and the reading color will change
  when the limit is exceeded
- One-point calibration and two-point calibration
- Can compensate the non-linearity of the twin-crystal probe
  by automatic V path correction
- Can store 100000 thickness values and 1000 waveforms
- USB 2.0 port connected to computer for statistics
- Languages: Chinese, English, German, French, Japanese
- Power off: automatic/manual

USB port

LCD with backlight

transducer
ISU-810D-TC510
(included)

Ød

4.00mm block for calibration

VIDEO

coating
substrate
Echo-Echo mode (E-E)

substrate
Transmit-Echo mode (T-E)

transducer
ISU-810D-TC550
(**optional**)

transducer
ISU-810D-P04
(**optional**)

transducer
ISU-810D-P06
(**optional**)

transducer
ISU-810D-PT08
(**optional**)

transducer
ISU-810D-ZT12
(**optional**)

transducer
ISU-810D-GT12
(**optional**)

SPECIFICATION

Measuring range	refer to the specification of transducers
Resolution	0.1/0.01mm
Accuracy	±0.05mm (H<10mm) ±(0.05%H+0.01)mm (H≥100mm) H is the thickness to be measured in mm
Display	320×240, color screen display
Measuring frequency	4Hz, 8Hz, 16Hz
Velocity	500~9999m/s
Applicable temperature	-20~50°C
Output	USB
Measuring unit	mm/inch
Power supply	2×1.5V AA batteries
Dimension	153×76×37mm
Weight	280g (including batteries)

STANDARD DELIVERY

Main unit	1 pc
Transducer ISU-810D-TC510	1 pc
Battery (AA)	2 pcs
Couplant	1 bottle
USB cable	1 pc

OPTIONAL ACCESSORY

Transducer	refer to the specification of transducers
Couplant (for ISU-810D-GT12)	ISU-HT5-COUPLANT

SPECIFICATION OF TRANSDUCERS

Code	Frequency	Diameter (Ød)	Measuring range	Applicable temperature	Application
ISU-810D-TC510 (included)	5MHz	13.5mm	1.2~400mm	-10~70°C	normal workpieces
ISU-810D-TC550 (optional)	5MHz	13.5mm	1~200mm	-10~70°C	fiberglass and organic material
ISU-810D-PT04 (optional)	10MHz	7mm	0.7~12mm	-10~70°C	small diameter workpieces
ISU-810D-PT06 (optional)	7.5MHz	8.7mm	0.8~30mm	-10~70°C	curved surface and small workpieces
ISU-810D-PT08 (optional)	5MHz	11mm	0.8~100mm	-10~60°C	normal workpieces
ISU-810D-ZT12 (optional)	2MHz	17mm	4~508mm	-10~70°C	cast iron (coarse grain) and thick workpieces
ISU-810D-GT12 (optional)	3MHz	15mm	2~80mm	-20~480°C	workpieces with high temperature

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ULTRASONIC THICKNESS GAGE
CODE ISU-720D

DATA OUTPUT
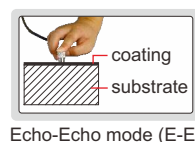
WITH A AND B SCAN

PENETRATE NON-METALLIC COATING AND MEASURE THE THICKNESS OF METAL SUBSTRATES

- Two measuring modes, Echo-Echo (E-E) and Transmit-Echo (T-E):
  - E-E is applicable for non-metallic coating (such as paint, plastic resin, etc.) on metal substrates, can penetrate coating and measure the thickness of substrates
  - T-E is to measure the thickness of material without coating, such as metal, plastic, glass, nylon, resin, ceramics, ice, etc.
- A scan, through the waveform, judges whether there are impurities, pores, cracks and so on inside, in order to avoid wrong measurement
- B scan, measures continuously, displays the thickness change on the screen
- Transducers can be automatically identified and zeroed
- Memory 10000 measurement values
- Data can be input to Excel and Word as keyboard signal
- Automatic or manual measurement
- When transducers are removed from workpieces, the measurement data are held on screen for easy viewing
- Set upper and lower limits for alarm when out-of-tolerance
- Automatic power off

USB port

LCD with backlight

4.00mm block for calibration

transducer **ISU-T07** (included)

A scan

B scan

Ød

SPECIFICATION (ON STEEL)

Measuring range	refer to specification of transducers
Resolution	0.1/0.01mm
Accuracy	±0.04mm (H<10mm) ±(0.04+H/1000)mm (10≤H<100mm) ±H/333mm (H≥100mm) H is the thickness to be measured in mm
Frequency	refer to specification of transducers
Display	320×240, color screen display
Velocity	1000~9999m/s
Measuring frequency	2 times/second and 10 times/second
Operation temperature of main unit	-20~50°C
Output	USB
Measuring unit	mm/inch
Power supply	2×1.5V AA batteries
Dimension	133×75×29mm
Weight	260g (including batteries)

Echo-Echo mode (E-E)
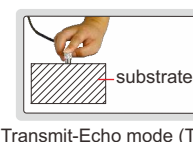
coating
substrate

Transmit-Echo mode (T-E)

substrate

VIDEO

transducer **ISU-T04** (**optional**)

transducer **ISU-T06** (**optional**)

transducer **ISU-T08** (**optional**)

transducer **ISU-T12** (**optional**)

transducer **ISU-T13** (**optional**)

transducer **ISU-T25** (**optional**)

STANDARD DELIVERY

Main unit	1 pc
Bicrystal transducer **ISU-T07**	1 pc
Battery (AA)	2 pcs
Couplant	1 bottle
USB cable	1 pc

OPTIONAL ACCESSORY

Transducer	ISU-T04, ISU-T06, ISU-T08, ISU-T12, ISU-T13, ISU-T25
Couplant (for ISU-T13)	ISU-HT5-COUPLANT

SPECIFICATION OF TRANSDUCERS (ON STEEL)

Code	Mode	Frequency	Diameter (Ød)	Measuring range	Minimum size of pipes for measurement (diameter × wall thickness)	Applicable temperature	Application
ISU-T07 (included)	T-E E-E	5.0MHz	13.2mm	T-E mode: 1.5~200mm E-E mode: 3~25mm	T-E mode: Ø25×3mm	-20~60°C	general use
ISU-T04 (optional)	T-E	10.0MHz	6mm	0.7~20mm	Ø15×1mm	-20~60°C	for small tubes
ISU-T06 (optional)	T-E	7.5MHz	9mm	0.7~50mm	Ø15×1.2mm	-20~60°C	for thin workpieces
ISU-T08 (optional)	T-E	5.0MHz	11mm	0.8~300mm	Ø25×1.2mm	-20~60°C	general use
ISU-T12 (optional)	T-E	2.0MHz	17mm	2~400mm	Ø40×3mm	-20~60°C	for casting iron
ISU-T13 (optional)	T-E	5.0MHz	15mm	3~100mm	Ø25×2mm	0~350°C	for high temperature
ISU-T25 (optional)	T-E	1.0MHz	26mm	3~200mm	–	-20~60°C	for fiberglass and organic material

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**DATA OUTPUT**

WITH A AND B SCAN

ULTRASONIC THICKNESS GAGE
(FOR THICK WORKPIECES MADE OF ORGANIC MATERIALS)
CODE ISU-710D

VIDEO

USB port

LCD with backlight

4.00mm block for calibration

Ød

- For thick workpieces made of organic materials
- A scan, through the waveform, judges whether there are impurities, pores, cracks and so on inside, in order to avoid wrong measurement
- B scan, measures continuously, displays the thickness change on the screen
- Transducers can be automatically identified and zeroed
- Memory 10000 measurement values
- Data can be input to Excel and Word as keyboard signal
- Automatic or manual measurement
- When transducers are removed from workpieces, the measurement data are held on screen for easy viewing
- Set upper and lower limits for alarm when out-of-tolerance
- Automatic power off

A scan

B scan

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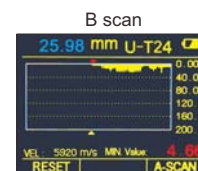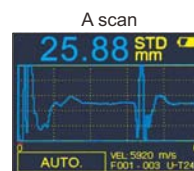
SPECIFICATION (ON STEEL)

Measuring range		20~590mm
Resolution		0.1/0.01mm
Accuracy		±(0.04+H/1000)mm (H<100mm) ±H/333mm (H≥100mm) H is the thickness to be measured in mm
Transducer	type	single element transducer
	frequency	1.0MHz
	diameter (Ød)	26mm
Display		320×240, color screen display
Velocity		1000~9999m/s
Measuring frequency		2 times/second and 10 times/second
Operation temperature		main unit: -20~50°C transducer: -20~60°C
Output		USB
Measuring unit		mm/inch
Power supply		2×1.5V AA batteries
Dimension		133×75×29mm
Weight		260g (including batteries)

STANDARD DELIVERY

Main unit	1 pc
Transducer	1 pc
Battery (AA)	2 pcs
Couplant	1 bottle
USB cable	1 pc

ULTRASONIC THICKNESS GAGE (FOR THIN WORKPIECES)
CODE ISU-700D

DATA OUTPUT

WITH A AND B SCAN

VIDEO

USB port

LCD with backlight

4.00mm block for calibration

Ød

- For thin workpieces
- A scan, through the waveform, judges whether there are impurities, pores, cracks and so on inside, in order to avoid wrong measurement
- B scan, measures continuously, displays the thickness change on the screen
- Transducers can be automatically identified and zeroed
- Memory 10000 measurement values
- Data can be input to Excel and Word as keyboard signal
- Automatic or manual measurement
- When transducers are removed from workpieces, the measurement data are held on screen for easy viewing
- Set upper and lower limits for alarm when out-of-tolerance
- Automatic power off

A scan

B scan
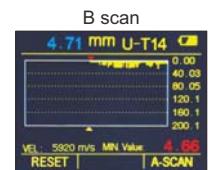
SPECIFICATION (ON STEEL)

Measuring range		Transmit-echo (T-E) mode: 1.5~20mm
		Echo-echo (E-E) mode: 0.2~10mm
Resolution		0.1/0.01/0.001mm
Accuracy		±0.04mm (H<10mm) ±(0.04+H/1000)mm (H≥10mm) H is the thickness to be measured in mm
Transducer	type	single element transducer
	frequency	15.0MHz
	diameter (Ød)	7.5mm
Display		320×240, color screen display
Velocity		1000~9999m/s
Measuring frequency		2 times/second and 10 times/second
Operation temperature		main unit: -20~50°C transducer: -20~60°C
Output		USB
Measuring unit		mm/inch
Power supply		2×1.5V AA batteries
Dimension		133×75×29mm
Weight		260g (including batteries)

transducer protective sleeve (included)
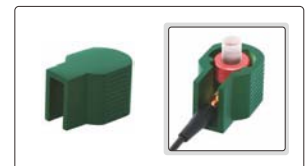
STANDARD DELIVERY

Main unit	1 pc
Transducer	1 pc
Transducer protective sleeve	1 pc
Battery (AA)	2 pcs
Couplant	1 bottle
USB cable	1 pc

PENETRATE NON-METALLIC COATING AND MEASURE THE THICKNESS OF METAL SUBSTRATE

DATA OUTPUT

INSPECTION CERTIFICATE

VIDEO

- Two measuring modes, Echo-Echo (E-E) and Transmit-Echo (T-E):
  – E-E is applicable for non-metallic coating (such as paint, plastic resin, etc.) on metal substrates, can penetrate coating and measure the thickness of substrates
  – T-E is to measure the thickness of material without coating, such as metal, plastic, glass, nylon, resin, ceramics, ice, etc.
- Tolerance measurement
- Average calculation of maximum 9 readings
- Data can be input to Excel and Word as keyboard signal

4.00mm block for calibration

LCD with backlight

USB port

transducer **ISU-T07** (included)

Ød

SPECIFICATION (ON STEEL)

Measuring range	refer to specification of transducers
Resolution	0.1/0.01mm
Accuracy	±0.04mm (H<10mm) ±(0.04+H/1000)mm (10≤H<100mm) ±H/333mm (H≥100mm) H is the thickness to be measured in mm
Velocity	1000~9999m/s
Operation temperature of main unit	-20~50°C
Output	USB
Measuring unit	mm/inch
Power supply	2×1.5V AAA batteries
Dimension	116×64×27mm
Weight	220g

Transmit-Echo mode (T-E)

substrate

Echo-Echo mode (E-E)

coating
substrate

transducer **ISU-T04** (**optional**)

transducer **ISU-T06** (**optional**)

transducer **ISU-T12** (**optional**)

transducer **ISU-T13** (**optional**)

STANDARD DELIVERY

Main unit	1 pc
Transducer ISU-T07	1 pc
Battery (AAA)	2 pcs
Couplant (for ISU-T04, ISU-T06, ISU-T07, ISU-T12)	1 bottle
USB cable	1 pc

OPTIONAL ACCESSORY

Transducer	ISU-T04, ISU-T06, ISU-T12, ISU-T13
Couplant (for ISU-T13)	ISU-HT5-COUPLANT

SPECIFICATION OF TRANSDUCERS (ON STEEL)

Code	Mode	Frequency	Diameter (Ød)	Measuring range	Minimum size of pipes for measurement (diameter × wall thickness)	Applicable temperature	Application
ISU-T07 (included)	T-E E-E	5.0MHz	13.2mm	T-E mode: 1.5~200mm E-E mode: 3~25mm	T-E mode: Ø25×3mm	-20~60°C	general use
ISU-T04 (optional)	T-E	10.0MHz	6mm	0.7~20mm	Ø15×1mm	-20~60°C	for small tubes
ISU-T06 (optional)	T-E	7.5MHz	9mm	0.7~50mm	Ø15×1.2mm	-20~60°C	for thin workpieces
ISU-T12 (optional)	T-E	2.0MHz	17mm	2~400mm	Ø40×3mm	-20~60°C	for casting iron
ISU-T13 (optional)	T-E	5.0MHz	15mm	3~100mm	Ø25×2mm	0~350°C	for high temperature

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ULTRASONIC THICKNESS GAGE
CODE ISU-250C

VIDEO

- Measure the thickness from one side of objects, suitable for pipes, tanks, etc.
- Applicable material: metal, plastic, glass, nylon, resin, ceramic, ice
- Tolerance measurement
- Average calculation of 9 readings
- Data can be input to Excel and Word as keyboard signal

4.00mm block for calibration

LCD with backlight

USB port

Ød

transducer **ISU-T08** (included)

SPECIFICATION (ON STEEL)

Measuring range	refer to specification of transducers
Resolution	0.1/0.01mm
Accuracy	±0.04mm (H<10mm) ±(0.04+H/1000)mm (10≤H<100mm) ±H/333mm (H≥100mm) H is the thickness to be measured in mm
Velocity	1000-9999m/s
Operation temperature of main unit	-20~50°C
Output	USB
Measuring unit	mm/inch
Power supply	2×1.5V AAA batteries
Dimension	64×116×27mm
Weight	220g

STANDARD DELIVERY

Main unit	1 pc
Transducer ISU-T08	1 pc
Battery (AAA)	2 pcs
Couplant (for ISU-T04, ISU-T06, ISU-T08, ISU-T12)	1 bottle
USB cable	1 pc

OPTIONAL ACCESSORY

Transducer	ISU-T04, ISU-T06, ISU-T12, ISU-T13
Couplant (for ISU-T13)	ISU-HT5-COUPLANT

transducer **ISU-T06** (optional)

transducer **ISU-T13** (optional)

transducer **ISU-T04** (optional)

transducer **ISU-T12** (optional)

SPECIFICATION OF TRANSDUCERS (ON STEEL)

Code	Frequency	Diameter (Ød)	Measuring range	Minimum size of pipes for measurement (diameter × wall thickness)	Applicable temperature	Application
ISU-T08 (included)	5.0MHz	11mm	0.8~300mm	Ø25×1.2mm	-20~60°C	general use
ISU-T04 (optional)	10.0MHz	6mm	0.7~20mm	Ø15×1mm	-20~60°C	for small tubes
ISU-T06 (optional)	7.5MHz	9mm	0.7~50mm	Ø15×1.2mm	-20~60°C	for thin workpieces
ISU-T12 (optional)	2.0MHz	17mm	2~400mm	Ø40×3mm	-20~60°C	for casting iron
ISU-T13 (optional)	5.0MHz	15mm	3~100mm	Ø25×2mm	0~350°C	for high temperature

ULTRASONIC THICKNESS GAGE (BASIC TYPE)
CODE ISU-100D

INSPECTION CERTIFICATE

POPULAR MODEL

VIDEO

LCD with backlight

4.00mm block for calibration

Ød

- Measure the thickness from one side of objects, suitable for pipes, tanks, etc.
- Applicable material: steel, stainless steel, glass, copper, brass, polystyrene, titanium, etc.

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SPECIFICATION (ON STEEL)

Measuring range	0.8~300mm
Resolution	0.1/0.01mm
Accuracy	±0.05mm (H<10mm) ±(0.05+H/1000)mm (10≤H<100mm) ±H/333mm (H≥100mm) H is the thickness to be measured in mm
Transducer	**frequency** 5MHz
	diameter (Ød) 10.8mm
Minimum size of pipes	20×1.2mm (diameter×wall thickness)
Velocity	1000-9999m/s
Operation temperature	main unit: -20~50°C transducer: -20~60°C
Measuring unit	mm/inch
Power supply	2×AAA batteries
Dimension	114×64×28mm
Weight	200g

STANDARD DELIVERY

Main unit	1 pc
Transducer	1 pc
Couplant	1 bottle
Battery (AAA)	2 pcs

STANDARD TEST BLOCKS FOR ULTRASONIC THICKNESS GAGES

STEP WEDGE BLOCKS CAN BE CUSTOMIZED

INSPECTION CERTIFICATE

cylinder block

- Supplied with manufacturer inspection certificate
- Material of step wedge blocks can be customized

Cylinder block set (17 blocks are included) (mm)

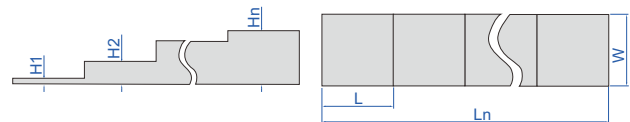| Code	Material	Diameter	Thickness	Accuracy	QTY
ISU-ST	45#	20	0.5	±0.01	1 pc
	45#	20	1		1 pc
	45#	20	1.2		1 pc
	45#	20	1.5		1 pc
	45#	20	2		1 pc
	45#	20	3.3		1 pc
	45#	20	5.5		1 pc
	45#	20	7.7		1 pc
	45#	20	10		1 pc
	45#	20	15		1 pc
	45#	20	20	±0.02	1 pc
	45#	20	25		1 pc
	45#	20	50		1 pc
	45#	20	75		1 pc
	45#	20	100	±0.05	1 pc
	45#	20	150		1 pc
	45#	20	200		1 pc

round tube block

Round tube block set (2 blocks are included) (mm)

Code	Material	Outer diameter	Wall thickness	Accuracy	Length	QTY
ISU-SWT	45#	30	2	±0.02	40	1 pc
	45#	40	3	±0.02	40	1 pc

step wedge block

Step wedge blocks (mm)

Code	Material	QTY of steps (n)	Thickness							Accuracy	Width (W)	Length of each step (L)	Total length (Ln)
			H1	H2	H3	H4	H5	H6	H7				
ISU-S4A	45#	4	6.25	12.5	18.75	25	-	-	-	±0.02	20	20	80
ISU-S4B	45#	4	5	10	15	20	-	-	-	±0.02	20	20	80
ISU-S5A	45#	5	2.5	5	7.5	10	12.5	-	-	±0.02	20	20	100
ISU-S5B	45#	5	2	4	6	8	10	-	-	±0.02	20	20	100
ISU-S7A	45#	7	3	12.5	24	30	36	42	48	±0.02	40	40	280
ISU-S7B	45#	7	1	1.5	2	4	6	8	10	±0.02	40	40	280

CONTACT/NON-CONTACT TACHOMETER
CODE 9225-405

- 2 measuring method, contact and non-contact
- Can measure rotary speed and line speed
- Automatically save the maximum value, minimum value and the last value, 500 data can be stored during continuous measurement
- Automatic power off

cone head (included)	cone cavity head (included)	reflection sticker (included)	wheel with 0.1m perimeter (included)	small cone head (included)	clamping sleeve (included)

SPECIFICATION

Measuring method		Non-contact	Contact
Measuring range	rotary speed	2.5~99999RPM	0.5~19999RPM
	line speed	—	0.05~500m/min
Resolution	rotary speed	0.1RPM (range 2.5~999.9RPM) 1RPM (range 1000~99999RPM)	0.1RPM (range 0.5~999.9RPM) 1RPM (range 1000~19999RPM)
	line speed	—	0.01m/min (range 0.05~99.99m/min) 0.1m/min (range 100~500m/min)
Accuracy	rotary speed	±(0.05%n+1d)RPM n is rotary speed, d is resolution	±(0.4%n+1d)RPM (n<300RPM) ±(0.05%n+1d)RPM (n≥300RPM) n is rotary speed, d is resolution
	line speed	—	±(1%+1d)m/min d is resolution
Laser power		CLASS 3R, 3mW~4mW	—
Sampling time		0.6s (above 100RPM)	
Measuring distance		50~500mm	—
Operation temperature		0~40°C	
Power supply		3×AA batteries	
Dimension		206×71×36mm	
Weight		170g	

STANDARD DELIVERY

Main unit	1 pc
Reflection sticker	3 pcs
Wheel with 0.1m perimeter	1 pc
Clamping sleeve	1 pc
Cone head	1 pc
Small cone head	1 pc
Cone cavity head	1 pc
Battery (AA)	3 pcs

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NON-CONTACT TACHOMETER
CODE 9223-120

- Accurately measure the rotary speed without contact
- Automatically save the maximum value, minimum value and the last value, 500 data can be stored during continuous measurement

SPECIFICATION

Measuring range	2.5~99999RPM
Resolution	0.1RPM (range 2.5~999.9RPM) 1RPM (range 1000~99999RPM)
Accuracy	±(0.05%n+1d)RPM n is rotary speed, d is resolution
Laser power	CLASS 3R, 3mW~4mW
Sampling time	0.6 second (above 100RPM)
Measuring distance	50~500mm
Operation temperature	0~40°C
Power supply	3×AA batteries
Dimension	180×71×29.9mm
Weight	145g

reflection sticker (included)

STANDARD DELIVERY

Main unit	1 pc
Reflection sticker	3 pcs
Battery (AA)	3 pcs

CONTACT TACHOMETER
CODE 9224-213

- Can measure rotary speed, line speed and line length
- Automatically save the maximum value, minimum value and the last value, 96 data can be stored during continuous measurement
- With backlight display

SPECIFICATION

Measuring range	rotary speed	0.5~19999RPM
	line speed	0.05~500m/min
	line length	0.05~99999m
Resolution	rotary speed	0.1RPM (range 0.5~999.9RPM) 1RPM (range 1000~19999RPM)
	line speed	0.01m/min (range 0.05~99.99m/min) 0.1m/min (range 100~500m/min)
	line length	0.02m
Accuracy	rotary speed	±(0.4%n+1d)RPM (n<300RPM) ±(0.05%n+1d)RPM (n≥300RPM) n is rotary speed, d is resolution
	line speed	±(1%+1d)m/min d is resolution
	line length	±(1%+1d)m d is resolution
Sampling time		0.8s (above 60RPM)
Operation temperature		0~40°C
Power supply		3×AA batteries
Dimension		171×71×35mm
Weight		162g

cone cavity head (included)

clamping sleeve (included)

cone head (included)

small cone head (included)

STANDARD DELIVERY

Main unit	1 pc
Wheel with 0.1m perimeter	1 pc
Clamping sleeve	1 pc
Cone head	1 pc
Small cone head	1 pc
Cone cavity head	1 pc
Battery (AA)	3 pcs

wheel with 0.1m perimeter (included)

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DIGITAL LED TACHOMETER/STROBOSCOPE
CODE ISQ-TS120K

- Make cyclical motion (rotation, vibration, etc.) objects to appear slow-moving or stationary
- On-line inspection or observation for moving objects
- Measure the rotation or vibration speed and frequency
- Can be triggered from outside by moving objects, make LED flash frequency same as the rotation or vibration

SPECIFICATION

Flash frequency range		60~120000FPM (flash per minute), 1~2000Hz
Resolution	FPM	0.1FPM (<100000FPM), 1FPM (≥100000FPM)
	HZ	0.01Hz (<200Hz), 0.1Hz (≥200Hz)
Setting accuracy		±0.01%
Phase shift increment		3°
Flash pulse duration time		0.1~2.5°
LED light		3 pcs CREE 10W lamp
LED life		3~5 years
Trigger mode		internal and external
Power supply		built-in rechargeable battery or AC/DC adapter
Dimension		208×70×60mm
Weight		380g

STANDARD DELIVERY

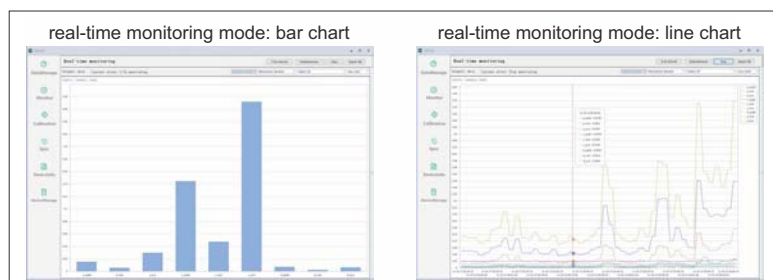| Main unit | 1 pc |
| AC/DC adapter | 1 pc |
| Proximity trigger | 1 pc |

VIDEO

proximity trigger (included)

make LED flash frequency same as the rotation or vibration (power supply from AC/DC adapter when external trigger is used)

| real-time monitoring mode: bar chart | real-time monitoring mode: line chart |

software (included), monitor and collect data to PC software via USB cable,
data can sent to Excel

length 2m

acceleration sensor
magnetic base

- Can measure vibration frequency
- Can measure virtual value/peak value/peak-peak value of acceleration, velocity and displacement
- Suitable for factory inspection, status monitoring and fault diagnosis of mechanical equipments
  such as motors, pumps, fans, household appliances, compressors, smoke machines,
  generators, gearboxes, etc
- Software is included: on-line monitoring, data storage

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SPECIFICATION

Measuring parameter	acceleration (virtual/peak/peak-peak value) $a_{RMS,1}$, $a_{Peak,1}$, $a_{P-P,1}$, a_{Peak}, a_{P-P}	velocity (virtual/peak/peak-peak value) $V_{RMS,1}$, $V_{Peak,1}$, $V_{P-P,1}$, V_{Peak}, V_{P-P}	displacement (virtual/peak/peak-peak value) $d_{RMS,1}$, $d_{Peak,1}$, $d_{P-P,1}$, d_{Peak}, d_{P-P}
Measuring range	0.01~200m/s^2 (peak value)	0.1~200mm/s (virtual value)	0.01~2mm (peak-peak value)
Frequency range	10Hz~5kHz	10Hz~1kHz	10Hz~500Hz
Amplitude frequency reponse	±5%		
Amplitude linearity	±5%		
Frequency accuracy	±0.5%		
Cut-off frequency (second-order high-pass filtering)	8kHz sampling frequency: 3.16Hz、10.00Hz、31.60Hz、N/A (adjustable) 32kHz sampling frequency: 12.64Hz、40.00Hz、126.4Hz、N/A (adjustable)		
Display	1.96" 128×64 dot matrix OLED screen		
Language	Chinese, English, Portuguese		
Power	<80mA/5V		
Power supply	4×AAA batteries: 6.0V/1000mAh; AC/DC adapter: 5V/2A		
Operation condition	temperature: -10°C~50°C; humidity: 25%RH~90%RH, non-condensing; pressure: 65kPa~108kPa		
Dimension	172×69×26mm		
Weight	240g		

STANDARD DELIVERY

Main unit	1 pc
Software	1 pc
Accelerometer (including cable)	1 pc
Magnetic base	1 pc
M5 screw	1 pc
Battery (AAA)	4 pcs
AC/DC adapter	1 pc

VIBRATION PEN (THREE PARAMETERS)
CODE 0020-A199

SPECIFICATION

Parameter	acceleration	velocity	displacement
Measuring range	0.01~199.9m/s² (peak value)	0.01~199.9mm/s (virtual value)	0.001~1.999mm (peak~peak value)
Frequency	10Hz~1kHz	10Hz~1kHz	10Hz~500Hz
Frequency response	±5% (≥20Hz) -20%~+10% (<20Hz)		
Linearity	±(5%+2unit)		
Indeterminacy of sensitivity	≤3%		
Operation temperature	0°C~40°C/32°F~104°F		
Operation humidity	<85%		
Power supply	2×LR44 battery (for 10 hours working)		
Dimension	150x22x18mm		
Weight	55g		

- Acceleration, velocity and displacement can be tested
- Automatic power off

STANDARD DELIVERY

Main unit	1 pc
LR44 battery	2 pcs

VIBRATION PEN
CODE 9720-199

VIDEO

STANDARD DELIVERY

Main unit	1 pc
LR44 battery	2 pcs

SPECIFICATION

Measured parameter	speed
Measuring range	0.1~199.9mm/s
Frequency	10Hz~1KHz
Accuracy	±(5%±2)mm/s
Operation temperature	0°C~40°C
Operation humidity	<85%
Power supply	2×LR44 batteries (for 10 hours wroking)
Dimension	150x22x18mm
Weight	55g

- Measure vibration of motors, fans, pumps, compressors and machine tools to prevent mechanical failure
- Small size, light weight, low energy consumption, easy operation, easy to carry
- One key control
- Automatic power off

PORTABLE VIBRATION CALIBRATOR
CODE 0021-AS159

- Quick, easy calibration and checking of vibration measurement, monitoring and recording system

SPECIFICATION

| Frequency	159.2Hz±1%
Acceleration	10m/s²±3% (RMS)
Distortion	<5%
Transverse vibration	<5%
Warm-up time	<20s
Maximum load	70g
Mounting thread	M5×0.8mm
Operation temperature	0°C~40°C
Operation humidity	10%RH~90%RH, non-condensing
Power supply	rechargeable lithium battery, working time≥5h
Dimension	Ø54.5×147mm
Weight	620g

M5×0.8mm thread hole

on/off, the light for working status

STANDARD DELIVERY

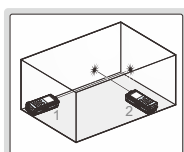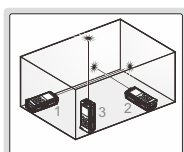| Main unit	1 pc
Power adapter	1 pc

VIDEO

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LASER DISTANCE METERS

- High accuracy models: **9561-50B**, **9561-70B**
  Low accuracy models: **9561-50B-F**, **9561-70B-F**
- Large display with backlight
- Unit: m, ft, in, ft+in
- Distance, area, volume and height measurement
- Continuos measuring mode to track maximum and minimum value
- Memory of 30 measurement values
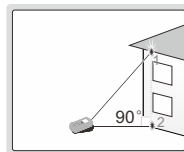- Automatic power off: laser 30s, main unit 180s
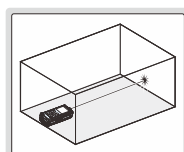
distance measurement   area measurement   volume measurement   height measurement

9561-50B

SPECIFICATION

Code	9561-50B	9561-70B	9561-50B-F	9561-70B-F
Measuring range	0.2~50m	0.2~70m	0.2~50m	0.2~70m
Resolution	0.001m, .001ft, 1/16"			
Accuracy	±(3+D/20)mm D: measured distance, unit: m		±(5+D/20)mm D: measured distance, unit: m	
Laser type	630~670nm, class II, <1mW			
Power supply	2×AAA batteries			
Dimension (L×W×H)	115×50×28mm			
Weight	95g			

STANDARD DELIVERY

Main unit	1 pc
Battery (AAA)	2 pcs

IP67
WATERPROOF

PEN-TYPE CONDUCTIVITY/TDS/SALINITY TESTER
CODE 0412-EB32

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- Can measure the conductivity, TDS and salinity
- Suitable for water quality testing, aquaculture, food processing, scientific research, etc.
- The same series of electrodes can be replaced with each other
- Automatic temperature compensation
- With the stabilizing and locking functions of the reading
- Can be used normally in any environment with the background light
- Auto power off
- Protection level: IP67
- Lightweight, easy to carry and operate

"platinum black needle" electrode (included)

IP67 waterproof

VIDEO

electrodes can be replaced

SPECIFICATION

Measuring range	conductivity 0~200.0µS/cm, 0~2000µS/cm, 0~20.00mS/cm
	TDS 0~100.0ppm, 0~1000ppm, 0~10.00ppt
	salinity 0~10.00ppt
	temperature 0~50°C
Resolution	conductivity 0.1µS/cm, 1µS/cm, 0.01mS/cm
	TDS 0.1ppm, 1ppm, 0.01ppt
	salinity 0.01ppt
	temperature 0.1°C
Accuracy	conductivity ±1%FS
	temperature ±0.5°C
Calibration mode	1~3 points
Power supply	4×1.5V AAA batteries
Dimension	178×40×40mm
Weight	133g

STANDARD DELIVERY

Main unit	1 pc
Standard solution	2 bottles
Test cup	2 pcs
1.5V AAA battery	4 pcs

PORTABLE CONDUCTIVITY/TDS METER
CODE 0411-0200

electrode holder

LCD with backlight

electrode holder

electrode

VIDEO

- Reading mode: auto-read and continuous-read
- Automatic/manual temperature compensation
- Auto-hold feature senses and locks the measurement endpoint
- Cell constant is settable
- 1 point calibration with standard recognition
- Data capacity up to 200 sets for each parameter
- IP65 dust/waterproof
- Auto power off

28

standard solution (included)

wristband (included)

SPECIFICATION

Conductivity	**range**	0.00µS/cm~200mS/cm
	resolution	0.01µS/cm minimum
	electronic unit accuracy	±1.0%FS
	measurement accuracy	±1.5%FS
	reference temperature	25°C/77°F
	calibration point	1
	standard recognition	84µS/cm, 1413µS/cm, 12.88mS/cm
TDS	**range**	0.00mg/L~300g/L
	resolution	0.01mg/L minimum
	accuracy	±1.0%FS
Temperature	**range**	-5~110°C/23~230°F
	resolution	0.1°C/0.2°F
	accuracy	±0.4°C/±0.7°F
Input		electrode with 5-pin aviation connector
Power supply		rechargeable battery
Dimension		80×225×35mm
Weight		400g

STANDARD DELIVERY

Main unit	1 pc
Electrode	1 pc
Electrode holder	2 pcs
Wristband	1 pc
Silicone rubber case	1 pc
AC/DC adapter and charging cable	1 pc
Standard solution	1 bottle

IP67
WATERPROOF

VIDEO

pH "bulb type"
electrode (included)

- 3 types of pH electrodes: bulb type, plane type and puncture type
- Suitable for water quality testing, sewage treatment, food and cosmetics testing, agriculture and scientific research, etc.
- Can measure the ORP, the same series of electrodes can be replaced with each other
- Automatic temperature compensation
- Alarm function: the red backlight displays alarm mode
- With the stabilizing and locking functions of the reading
- Protection level: IP67
- Can be used normally in any environment with three colors of backlight
- Auto power off
- Lightweight, easy to carry and operate

ORP "platinum needle"
electrode (**optional**)

pH "plane type" electrode
(**optional**)

pH "puncture type"
electrode (**optional**)

SPECIFICATION

Measuring range	-2.00~16.00pH
	temperature 0~50°C
	ORP -1000mV~+1000mV
Resolution	0.01pH
	temperature 0.1°C
	ORP 1mV
Accuracy	±0.02pH
	temperature ±0.5°C
	ORP ±0.2%FS
Calibration mode	1~3 points
Standard solution	USA (pH buffers: 4.00, 7.00, 10.01) NIST (pH buffers: 4.01, 6.86, 9.18)
Power supply	4×1.5V AAA batteries
Dimension	178×40×40mm
Weight	133g

STANDARD DELIVERY

Main unit	1 pc
Standard solution	3 bottles (USA)
Test cup	3 pcs
KCl powder	1 bottle
1.5V AAA battery	4 pcs

OPTIONAL ACCESSORY

pH plane type electrode	0432-HB-F
pH puncture type electrode	0432-HB-P
ORP electrode	0432-HB-O

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PORTABLE pH METER
CODE 0431-0018

electrode holder

electrode holder

LCD with backlight

electrode

wristband (included)

KCl powder (included)

standard solution (included)

28

- Reading mode: auto-read and continuous-read
- Automatic/manual temperature compensation
- Auto-hold feature senses and locks the measurement endpoint
- 1 or 2 points calibration with standard recognition
- Data capacity up to 200 sets for each parameter
- IP65 dust/waterproof
- Auto power off

SPECIFICATION

pH	**range**	-2.00~18.00pH
	resolution	0.01pH
	electronic unit accuracy	±0.01pH
	measurement accuracy	±0.02pH
	calibration point	1 or 2
	standard recognition	NIST pH buffers: 4.01, 7.00, 10.01
Voltage	**range**	-1999~1999mV
	resolution	1mV
	accuracy	±0.1%FS
Temperature	**range**	-5~110°C/23~230°F
	resolution	0.1°C/0.2°F
	accuracy	±0.4°C/±0.7°F
Inputs		pH electrode: BNC (Q9)
		temp. probe: 4-pin aviation connector
Power supply		rechargeable battery
Dimension		80×225×35mm
Weight		400g

STANDARD DELIVERY

Main unit	1 pc
Electrode	1 pc
Electrode holder	2 pcs
Wristband	1 pc
Silicone rubber case	1 pc
AC/DC adapter and charging cable	1 pc
Standard solution	3 bottles
KCl powder	1 bottle

ONLINE REFRACTIVITY SENSORS

- Based on the principle of light refraction and total reflection, measure the concentration of coolant, sugar liquid and other liquids in real time
- High measuring accuracy and wide measuring range
- Automatic temperature compensation
- Screw thread, flange, chuck and other installation methods can be customized
- Use sapphire prism, high hardness and wear-resistant
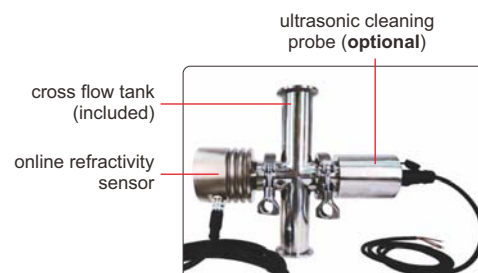- Resistance to dirty, easy to clean
- Protection level of probe part: IP67

VIDEO

5806-ZX10   **5806-ZX20**

SPECIFICATION

Code	5806-ZX10	5806-ZX20
Type	flat-top	round-top
Measuring range	Brix 0.00~90.00%	
	refractivity 1.33299~1.51782	
	temperature 0~60°C	
Accuracy	Brix ±0.20%	
	refractivity ±0.00030	
	temperature ±0.5°C	
Resolution	Brix 0.01%	
	refractivity 0.00001	
	temperature 0.1°C	
Measuring mode	immersion	
Pressure resistance	≤1MPa	
Measuring speed	1 time/5s	
Output (customizable)	analog output: (4~20)mA for Brix (0.00~90.00)%	
	digital output: RS485	
Power supply	DC 24V±10%, working current <100mA	
Dimension	Ø88×109mm	Ø88×133mm
Weight	827g	882g

ultrasonic cleaning probe (**optional**)

cross flow tank (included)

online refractivity sensor

STANDARD DELIVERY

Main unit	1 pc
Cross flow tank	1 pc
Clamp	4 pcs
Polytef gasket	6 pcs
Connector	2 pcs
Wall piece	1 pc

OPTIONAL ACCESSORY

Ultrasonic cleaning probe	5806-ZX-UCP
High pressure water/air cleaning device	5806-ZX-HPC
Automatic brush cleaning system	5806-ZX-AC

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SUITABLE FOR WATER BASED COOLANT

DIGITAL REFRACTOMETER
CODE ISQ-DRM31

- Quickly measure the concentration of coolant, sugar solution, juice and drinks
- Two measurement modes: single measurement and automatic average multiple measurement
- Two units: brix and refractive index
- Refer to the refraction factor of coolant, for example: the refraction factor of grinding emulsion is 2.1, the reading value is 6%, so the actual concentration is (2.1×6%)=12.6%
- Automatic power off

VIDEO

SPECIFICATION

Measuring range	0~50% (1.3330~1.4200RI)
Accuracy	±0.2% (±0.0003RI)
Resolution	0.1% (0.0001RI)
Power supply	1×AAA battery
Dimension	121×58×25mm
Weight	90g

dropper (included)

STANDARD DELIVERY

Main unit	1 pc
Dropper	1 pc
Battery (AAA)	1 pc

MINI DIGITAL REFRACTOMETER
CODE 5801-A55

SUITABLE FOR WATER BASED COOLANT

- Quickly measure the concentration of coolant
- Automatic temperature compensation
- Brix and refractive index can be displayed
- Refer to the refraction coefficient of coolant, for example:
  the refraction coefficient of grinding emulsion is 2.1, the reading
  value is 6%, so the actual concentration is (2.1×6%)=12.6%
- Automatic power off

SPECIFICATION

Measuring range	0~50% (1.3330~1.4200RI)
Accuracy	±0.2% (±0.0003RI)
Resolution	0.1% (0.0001RI)
Power supply	built-in 3.7V rechargeable lithium battery
Dimension	147×46×27mm
Weight	115g (including battery)

STANDARD DELIVERY

Main unit	1 pc
Dropper	1 pc

dropper (included)

PORTABLE REFRACTOMETER
CODE ISQ-RM30

SUITABLE FOR WATER BASED COOLANT

- Quickly measure the concentration of coolant
- Refer to the refraction factor of coolant, for example:
  the refraction factor of grinding emulsion is 2.1,
  the reading value is 6%, so the actual concentration
  is (2.1×6%)=12.6%

calibration screw

eyepiece

lens and cover plate

SPECIFICATION

Measuring range	0~32%
Graduation	0.2%
Dimension	27×40×160mm
Weight	175g

VIDEO

PORTABLE REFRACTOMETER FOR AUTOMOTIVE LIQUID
CODE 5802-A510

- Measure the freezing point of the antifreeze
  and the concentration of urea in diesel exhaust fluid
- Measure the specific gravity of battery fluid

calibration screw

eyepiece

lens and cover plate
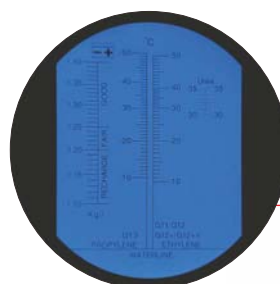
SPECIFICATION

Measuring object	ethylene glycol	propylene glycol	urea	battery fluid
Measuring range	-50~0°C	-50~0°C	30~35%	1.10~1.40kg/l
Accuracy	±5°C	±5°C	±1%	±0.02kg/l
Resolution	1°C	1°C	1%	0.01kg/l
Dimension	27×40×160mm			
Weight	172g			

PORTABLE REFRACTOMETER FOR DIESEL EXHAUST FLUID
CODE 5803-B40

- Measure the concentration of urea in diesel exhaust fluid
- Wide measuring range

calibration screw

eyepiece

lens and cover plate

SPECIFICATION

Measuring range	0~40%
Accuracy	±0.2% (20°C)
Resolution	0.2%
Dimension	27×40×160mm
Weight	170g
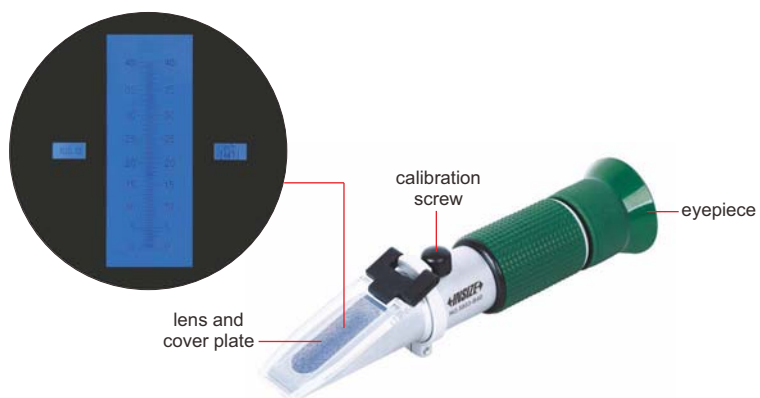
DIGITAL STOPWATCH
CODE DSW-A010

- Split time, total time and continuous time can be displayed
- 10 groups of results can be read out from memory after resetting
- Scroll back and forth to read out the memory digits
- The fastest, slowest and average time can be displayed
- Able to record the split times (00-199)

SPECIFICATION

Measuring range		0~9 hours, 59 minutes, 59.99 seconds
Resolution		0.01s
Accuracy		±0.5s
Function	memory	10 groups
	timer	up to 10 hours
	time	12-hour or 24-hour time display, alarm can be set
Power supply		LR44 battery
Screen dimension		33.6×13.6mm
Dimension		76×63×16mm (metal case)

STANDARD DELIVERY

Main unit	1 pc
String	1 pc

STROKE COUNTER
CODE 7600-6

- Accumulate and record the number of mechanical movements
- Rotate back to zero

Unit: mm

92   32

48

SPECIFICATION

Code	Number of digits	Range
7600-6	6	0-999999

DIGITAL MOISTURE METER
CODE 9341-50

- Suitable for wood, smooth cement, hard gypsum, mixed mortar, brick, etc.
- Measure moisture, temperature and relative humidity
- Temperature type: ambient, dew point, wet bulb
- Maximum and minimum modes
- Automatic power off

cover (included)

SPECIFICATION

Measuring depth		0~50mm
Measuring range	moisture	0~60%
	temperature	-10~50°C/14~122°F
	relative humidity	0~100%RH
Accuracy	moisture	±2%
	temperature	±2%
	relative humidity	±5%RH
Resolution	moisture	0.1%
	temperature	0.1°C/0.1°F
	relative humidity	0.1%RH
Sampling time		0.5s for moisture
		1s for temperature and relative humidity
Power supply		2×AAA batteries
Dimension		130×56×29mm
Weight		206g

STANDARD DELIVERY

Main unit	1 pc
Battery (AAA)	2 pcs

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INDUCTIVE MOISTURE METER
CODE 0120-IM24

- Suitable for wood, gypsum and cement
- MAX/MIN/HOLD mode
- Alarm function
- Low battery indication
- Auto power off

SPECIFICATION

Measuring range	0~100%
Resolution	1%
Accuracy	±4%
Detection depth	20~40mm
Sampling time	0.5s
Battery	9V
Dimension	185×55×38mm
Weight	193g

STANDARD DELIVERY

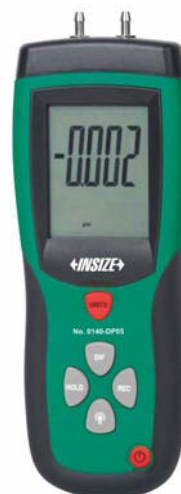| Main unit	1 pc
Battery	1 pc

DIFFERENTIAL PRESSURE MANOMETER
CODE 0140-DP05
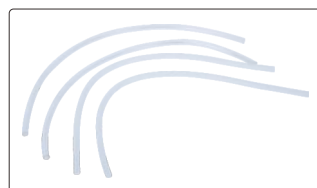
soft tubes (included)

- Offset and differential measurement
- Record maximum/minimum/average value with relative timestamp
- Built-in USB interface for data transmission
- Unit: psi, inH_2O, bar, mbar, kPa, inHg, mmHg, oz/in^2, ftH_2O, cmH_2O, kg/cm^2
- Zero adjust
- Data hold
- Display with backlight
- Low battery indication
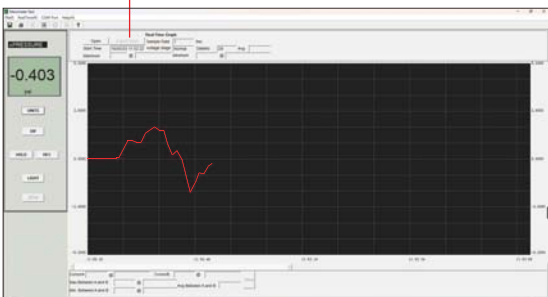- Automatic power off
- Safety rating: CAT III 600V

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SPECIFICATION

Pressure range	-5~5psi										
Maximum pressure	20psi										
Unit	psi	inH_2O	bar	mbar	kPa	inHg	mmHg	oz/in^2	ftH_2O	cmH_2O	kg/cm^2
Range	5	138.3	0.344	344.7	34.47	10.18	258.5	80	11.53	351.5	0.351
Resolution	0.001	0.1	0.001	0.1	0.01	0.01	0.1	0.01	0.01	0.1	0.001
Accuracy	±0.3%FSO (25°C)										
Repeatability	±0.2% (Max. ±0.5%FSO)										
Linearity/hysteresis	±0.29%FSO										
Response time	0.5s typical										
Operation temperature	0°C~50°C										
Power supply	1×9V 6F22 battery or AC/DC adapter										
Dimension (LxWxH)	165×90×40mm										
Weight	350g										

STANDARD DELIVERY
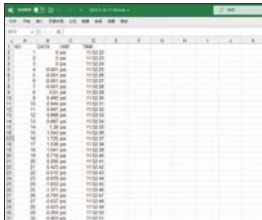
Main unit	1 pc
AC/DC adapter	1 pc
9V battery	1 pc
Software flash disk	1 pc
USB cable	1 pc
Soft tubes	4 pcs

software (included), connect to PC via USB cable

export data

display realtime value and curve

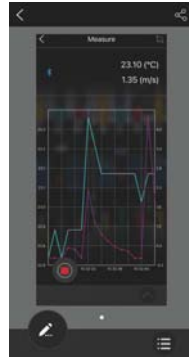export data to Excel

ANEMOMETER
CODE 0110-1125

App measurement   App record

- Measure air velocity and temperature
- Min/Max, data hold function
- Bluetooth 4.0
- Auto power off
- Supplied with APP for Apple and Android

SPECIFICATION

	Unit	Measuring range	Resolution	Accuracy
Air velocity	m/s	1.1~25.0	0.01	±(3%+0.3)
	km/h	4~90	0.1	±(3%+1)
	ft/min	220~4920	1	±(3%+40)
	MPH	2.5~56.0	0.1	±(3%+0.4)
	knots	2.2~48.0	0.1	
Air temperature	°C	0~50	0.1	±2
	°F	32~122	0.1	±4
Sensors	air velocity sensor, NTC-type precision thermistor			
Sampling time	0.5s			
Operation altitude	max 2000m			
Operation environment	0~50°C, 0~80%RH			
Storage environment	-10~60°C, 0~80%RH			
Auto power off	10 minutes			
Data port	bluetooth 4.0			
Power supply	9V			
Dimension	213×54×36mm			
Weight	172g			

STANDARD DELIVERY

Main unit	1 pc
Battery	1 pc

BOURDON TUBE PRESSURE GAGES (LIQUID FILLED)

CAN BE CUSTOMIZED

- Stainless steel case and bezel, copper alloy internals
- Shock-proof and pulse-proof
- Suitable for pneumatic systems, hydraulic systems and compressed air systems

Dial size	Ø63mm		
Process connection	1/4BSP	1/4ZG	1/4NPT
Connector location	bottom	bottom	bottom
Range (0~10bar/0~150psi)	5201-63B2Y10	5201-63Z2Y10	5201-63N2Y10

SPECIFICATION

Accuracy class	1.6
Ambient temperature	-20~60°C
Medium temperature	≤60°C

5201-63B2Y10

SOUND LEVEL METER (PROFESSIONAL TYPE)
CODE 0011-FA25

microphone

preamplifier

software (included), monitor and collect data to PC software via USB cable, data can sent to Excel

real-time monitoring mode: bar chart	real-time monitoring mode: line chart
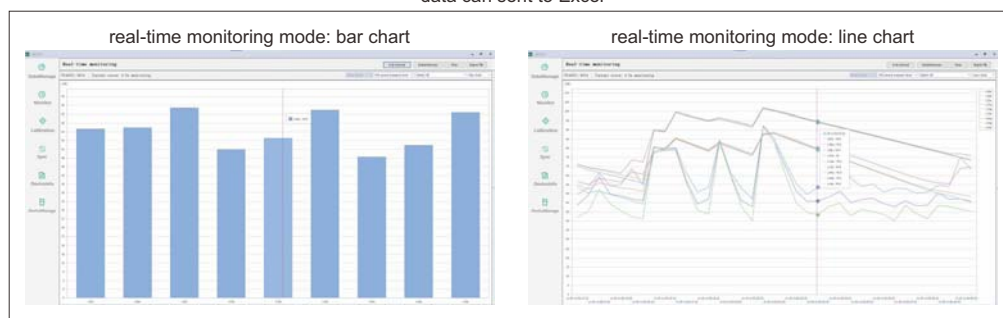
- Integral function: 1s~24h (adjustable)
- Wide frequency range, large dynamic range, low background noise
- Parallel time weight and frequency weight
- Single range without shifting
- Software is included: on-line monitoring, data storage

VIDEO

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SPECIFICATION

Accuracy	IEC 61672-1:2013 class 2
Microphone	1/2 inch prepolarized condenser microphone
Measuring range	25dB (A)~141dB (A); 35dB (C)~141dB (C); 50dB (Z)~141dB (Z) other frequency linear ranges: 31.5Hz: 26dB (A)~101dB (A); 12.5kHz: 25dB (A)~136dB (A)
Frequency	20Hz~12.5kHz
Self-generated electrical noise	<17dB (A), <23dB (C), <33dB (Z)
Frequency weighting	parallel A, C, Z weightings
Time weighting	parallel F (Fast), S (Slow), I (Impulse) weightings
Measuring function	Lp, Leq,t, Leq,T, Lmax, Lmin, Lpeak, SEL
Integral time	1s-24h (adjustable)
Start mode	button/clock/limit/interval
Power setting	power on or off regularly
Data storage	4MB FLash RAM 4 sets of parameter templates, 128 measurement point names; 64 calibration records
Language	Chinese, English, Portuguese
Power	<80mA/5V
Power supply	4×AAA batteries (for 10 hours working) AC/DC adapter: 5V/2A
Operation condition	temperature: -10°C~50°C humidity: 25%RH~90%RH, non-condensing pressure: 65kPa~108kPa
Dimension	230×69×26mm
Weight	180g

STANDARD DELIVERY

Main unit	1 pc
Software	1 pc
Windscreen	1 pc
Battery (AAA)	4 pcs
AC/DC adapter	1 pc

DIGITAL SOUND LEVEL METER (ADVANCED TYPE)
CODE 9353-413

- Automatic range conversion
- Over range indicator
- Maximum mode
- Data hold
- AC signal output: 0.707Vrms, impedance approx.100Ω
  DC signal output: 20mV/dB, impedance approx.1kΩ

SPECIFICATION

Measuring range	40dB~130dB (ref.20μPa)
Frequency	20Hz~12.5kHz
Resolution	0.1dB
Accuracy	IEC 61672-1:2013 class 2
Frequency weighting	A weighting
Response time	fast (125ms), slow (1s)
Microphone	pre polarization condenser microphone
Refercner direction	axial direction of condenser microphone
Power supply	4×1.5V AAA batteries
Dimension	210×68×27mm
Weight	240g

STANDARD DELIVERY

Main unit	1 pc
Battery (AAA)	4 pcs
Precision screwdriver	1 pc

SOUND LEVEL METER (BASIC TYPE)
CODE 0010-A35

App measurement   App record

- Auto range selection
- Over range indication
- Display backlight
- Min/Max, data hold function
- Bluetooth 4.0
- Auto power off
- Supplied with APP for
  Apple and Android

SPECIFICATION

Frequency	31.5Hz~8KHz
Measuring range	35dB~130dB
Accuracy	±3.0dB (ref 94dB@1kHz)
Resolution	0.1dB
Frequency weighting	A and C
Display update	2 times/sec
Microphone	1/2 inch electret condenser microphone
Power supply	9V battery
Operation temperature and humidity	0°C~40°C/32°F~104°F, 10%RH~90%RH
Dimension	185×54×36mm
Weight	184g

STANDARD DELIVERY

Main unit	1 pc
Battery	1 pc
Windscreen	1 pc

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730

DATA OUTPUT

DIGITAL SOUND LEVEL METER
CODE 9351-130

- Automatically select best range: 30~80dB, 40~90dB, 50~100dB, 60~110dB, 70~120dB, 80~130dB
- Over range indicator
- Real time, average, maximum modes
- Memory 16000 measurement values
- AC signal output: 0.707 Vrms at FS, impedance approx. 600Ω
  DC signal output: 10mV/dB, impedance approx.100Ω
- Automatic power off

SPECIFICATION

Measuring range	30~130dB
Accuracy	±2dB
Resolution	0.1dB
Sampling time	0.5s for digital, 0.05s for analogue
Response time	fast: 125ms, slow: 1s
Frequency	30Hz~8KHz
Frequency weighting	A/C
Microphone	electret condenser type
Output	RS232, AC/DC
Power supply	6×AAA batteries
Dimension	265×80×69mm
Weight	317g

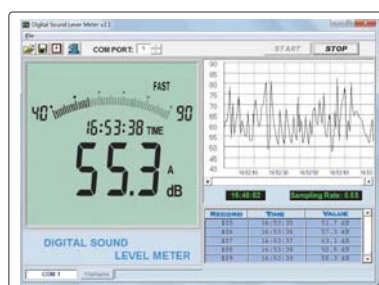### STANDARD DELIVERY

Main unit	1 pc
Software and RS232 cable	1 pc
Output connector	1 pc
Battery (AAA)	6 pcs

software flash disk (included)

VIDEO

software (included), display measurement values and graph, save and output data

LIGHT METER
CODE 0131-A120

- Photosensor can rotate 90° clockwise and 180° counterclockwise
- Build-in calibration filters ensure the accuracy when working in different colors
- Data hold function
- Lux/FC unit switch
- Low battery alarm

rotate 90° clockwise

rotate 180° counterclockwise

SPECIFICATION

Measuring range	0.1~199.9Lux	1~1999Lux	10~19990Lux	100~199900Lux
Resolution	0.1Lux	1Lux	10Lux	100Lux
Measuring range	0.01~19.99FC	0.1~199.9FC	1~1999FC	10~19990FC
Resolution	0.01FC	0.1FC	1FC	10FC
Accuracy	±(4%+10d), range<20000Lux/2000FC ±(5%+10d), range≥20000Lux/2000FC (d is resolution, calibrated with standard incandescent lamp at color temperature 2856K)			
Repeatability	±2%			
Sampling time	0.5s			
Operation environment	0~40°C, 0~70%RH			
Storage environment	-10~50°C, 0~80%RH			
Battery	9V			
Dimension	185×68×38mm			
Weight	130g			

STANDARD DELIVERY

Main unit	1 pc
Battery	1 pc

LIGHT METER (BASIC TYPE)
CODE 0130-L110

- Suitable for measuring illuminance in various occasions
- Data hold function
- Fast switching of measuring range, easy to operate

SPECIFICATION

Measuring range	1~1999Lux	10~19990Lux	100~100000Lux
Resolution	1Lux	10Lux	100Lux
Accuracy	±(4%+10d), range<10000Lux ±(5%+10d), range≥10000Lux (d is resolution, calibrated with standard incandescent lamp at color temperature 2856K)		
Repeatability	±2%		
Sampling time	0.5s		
Operation environment	0~40°C, 0~70%RH		
Storage environment	-10~50°C, 0~80%RH		
Battery	9V		
Photodetector dimension	105×58×28mm		
Main unit dimension	130×72×30mm		
Weight	170g		

STANDARD DELIVERY

Main unit	1 pc
Battery	1 pc

UV LIGHT METER
CODE 0132-UV199

- Self-recognize probes
- Real-time value, maximum value, minimum value, average value, time, energy value are displayed at the same time

VIDEO

MAIN UNIT SPECIFICATION

Display	240×160 LCD
Power supply	4 AAA alkaline batteries
Dimension	148×76×26mm
Weight	194g

STANDARD DELIVERY

Main unit	1 pc
Probe 0132-UVA1	1 pc
Battery	4 pcs

probe
0132-UVA1
(included)

PROBE SPECIFICATION

Probe code	0132-UVA1 (included)	0132-UVC0 (optional)	0132-UVCWP1 (optional)
Application	general purpose low power UVA intensity and energy measurement	intensity and energy measurement of 254nm UV sterilization mercury lamp	intensity and energy measurement of 254nm UV sterilization mercury lamp
Spectral response	λp=365nm 315nm-400nm	λp=254nm 230nm-280nm	
Power measuring range	0~200000μW/cm²		
Resolution	0.1μW/cm²		
Energy measuring range	0-9999999μJ/cm²		
Measuring accuracy	±10%		
Record time	0-99999s		
Sampling speed	6 times/second		
Measuring unit	μW/cm² (default), mW/cm², W/m²		
Test hole diameter	Ø10mm		
Probe size	39×32×15mm	Ø39×15mm	Ø50×20mm
Waterproof depth	—	—	1m

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Probe code	0132-UVCLED0 (optional)	0132-UVB0 (optional)	0132-UVA0 (optional)
Application	measurement of 260nm-285nm UV LED sterilization lamp	general purpose UVB intensity and energy measurement	intensity and energy measurement of light source of high pressure mercury lamp in UV curing industry
Spectral response	280nm-315nm *	λp=310nm * * 280nm-315nm	λp=365nm 315nm-400nm
Power measuring range	0~200000μW/cm²		0~2000mW/cm²
Resolution	0.1μW/cm²		0.1mW/cm²
Energy measuring range	0-9999999μJ/cm²		
Measuring accuracy	±10%		
Record time	0-99999s		
Sampling speed	6 times/second		2048 times/second
Measuring unit	μW/cm² (default), mW/cm², W/m²		mW/cm² (default), W/m²
Test hole diameter	Ø10mm		
Probe size	Ø39×15mm		39×32×15mm

*Wide spectral range, avoid using in strong light
**Suitable for measuring UVB light source with wavelength 297nm, 308nm, and 313nm

Probe code	0132-UVALED0 (optional)	0132-UVALED1 (optional)	0132-UVALED3 (optional)
Application	intensity and energy measurement of area light source of UV LED in UV curing industry	intensity and energy measurement of point light source of UV LED in UV curing industry	general purpose UVA+UVV LED intensity and energy measurement, low power measuring range
Spectral response	calibrated with 395nm UV LED 340nm-420nm		
Power measuring range	0~20000mW/cm²		0~200000μW/cm²
Resolution	1mW/cm²		0.1μW/cm²
Energy measuring range	0-9999999μJ/cm²		
Measuring accuracy	±10%		
Record time	0-99999s		
Sampling speed	2048 times/second		6 times/second
Measuring unit	mW/cm² (default), W/cm², W/m²		μW/cm² (default), mW/cm², W/m²
Test hole diameter	Ø10mm	Ø1mm	Ø10mm
Probe size	39×32×15mm		

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IP65 WATERPROOF

SINGLE GAS DETECTORS

- Detect combustible gas (EX, including CH_4, C_3H_8, H_2, etc), O_2, CO or H_2S, support more than 30 types of gas sensors, customization for detecting toxic gases (such as NO, NH_3, PH_3, etc) available
- Adjustable alarm level, alarm mode: sound, light, vibration
- Adjustable calibration level
- Sampling method: natural diffusion
- High concentration protection for sensor
- Up to 500 alarm records storage capacity
- Self-test on startup
- Display with backlight
- Language: English, Chinese
- Low battery indication
- Explosion proof level: Ex ib IIB T3 Gb

calibration cap (included)

VIDEO

0611-SG01

SPECIFICATION

Code	0611-SG01	0611-SG02	0611-SG03	0611-SG04
Gas	combustible gas/EX	O_2	CO	H_2S
Range	0-100%LEL	0-30%vol	0-1000ppm	0-100ppm
Resolution	1%LEL	0.1%vol	1ppm	1ppm
Accuray	±5%FS			
Response time	T_{90}<60s			
Operation environment	temperature: -10°C~55°C; humidity: <95%RH, no condensation			
Sensor lifetime	2 years (depending on working environment)			
Power supply	3.7V rechargeable Li-ion battery, working time>8h			
Dimension (LxWxH)	124×60×46mm			
Weight	205g			

STANDARD DELIVERY

Main unit	1 pc
Calibration cap	1 pc
AC/DC adapter and charging cable	1 pc

MULTI GAS DETECTOR
CODE 0612-MG04

DATA OUTPUT

IP66 WATERPROOF

software flash disk (included)

charging cable (included)

calibration cap (included)

VIDEO

charging and data transmission interface on the back

- Detect combustible gas (EX, including CH_4, C_3H_8, H_2, etc), oxygen (O_2), carbon monoxide (CO) and hydrogen sulfide (H_2S), optional configuration includes other toxic gases such as NO, NH_3, PH_3, etc; support more than 30 types of gas sensors, flexible sensor combination and customization available
- Adjustable alarm level, alarm mode: sound, light, vibration and screen display
- Adjustable calibration level
- Sampling method: natural diffusion
- High concentration protection for sensor
- Data transmission via charging interface
- Up to 1000 alarm records storage capacity
- Self-test on startup
- Display with backlight
- Language: English, Chinese and Spanish (Portuguese and Russian customizable)
- Low battery indication
- Explosion proof level: Ex ib IIC T4 Gb

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SPECIFICATION

Gas	combustible gas (EX)	O_2	CO	H_2S
Range	0-100%LEL	0-30%vol	0-1000ppm	0-100ppm
Resolution	1%LEL	0.1%vol	1ppm	1ppm
Accuray	±5%FS			
Response time	T_{90}<60s			
Operation environment	temperature: -10°C~50°C; humidity: <95%RH, no condensation			
Sensor lifetime	2 years (depending on working environment)			
Power supply	3.7V rechargeable Li-ion battery, working time>8h			
Dimension (LxWxH)	150×72×48mm			
Weight	310g			

STANDARD DELIVERY

Main unit	1 pc
Calibration cap	1 pc
Software and USB cable	1 pc
AC/DC adapter	1 pc

software (included), connect to PC via USB cable, display test data and export record
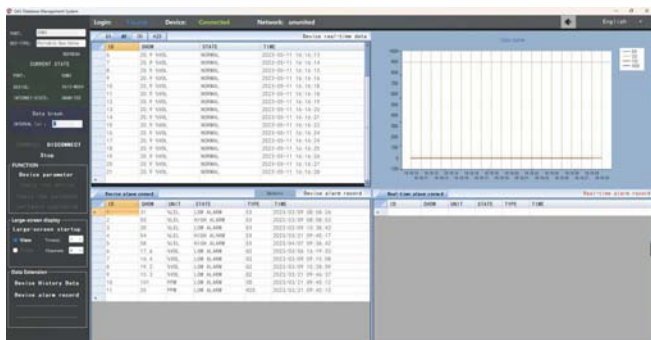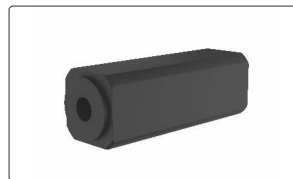

display real-time data and alarm record
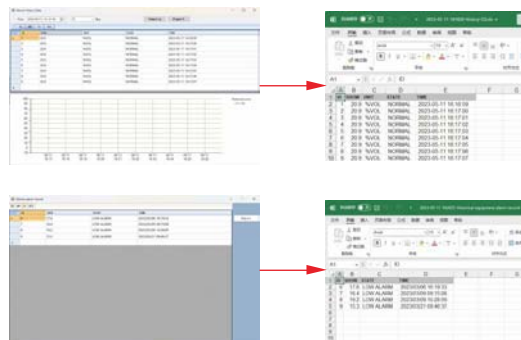
export history data and alarm record

INSIZE

TESLAMETERS (GAUSSMETERS)

magnetic shielding cavity (**optional**)

axial probe (**optional**)

- Measure magnetic induction of DC magnetic field
- Directly display the N/S polarity of the measured magnetic field
- One-key zero function: eliminate the influence of zero drift before measurement
- Maximum value hold: record the maximum value of the changing magnetic field
- Unit switch between mT or G (1mT=10G)
- Auto ranging
- Built-in USB interface for data transmission
- Display with backlight
- Auto power off

radial probe (included)

0501-MA01

SPECIFICATION

Code	0501-MA01	0501-MA05
Range	2000mT	
Resolution	0.01mT (0~200mT) 0.1mT (200~2000mT)	
Accuray	±1.0%	±2.0% (≤1000mT) ±5.0% (1000mT~2000mT)
Temperature coefficient	±0.1%/K	
Zero drift	±0.5mT/h	
Interface	USB	
Power supply	3×1.5V AA batteries or USB	
Dimension (L×W×H)	165×90×40mm	
Weight	350g	

STANDARD DELIVERY

Main unit	1 pc
Radial probe	1 pc
Battery (AA)	3 pcs

OPTIONAL ACCESSORY

Axial probe	0501-PA
Magnetic shielding cavity	0501-SHIELD

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LASER BELT TENSION METER CODE 5900-HZ18

- Laser sensor, direct measurement, easy to use
- Two sensors: internal and external, external sensor is suitable for measurement in narrow spaces
- Automatic power off

VIDEO

SPECIFICATION

Measuring range	10~800Hz	
Input parameter range	maximum free belt length: 99.99m maximum belt weight: 9.999kg/m	
Accuracy	±5%	
Unit	N, lbf	
Measuring distance	3~20mm	
Operation temperature	10~50°C	
Power supply	4×1.5V AAA batteries	
Dimension	main unit	178×72×34mm
	external sensor	124×21×12mm
Weight	180g	

STANDARD DELIVERY

Main unit	1 pc
External sensor	1 pc

external sensor

internal sensor

LIGHT TRANSMITTANCE METER
CODE 5804-LT21

VIDEO

fixed base (included)
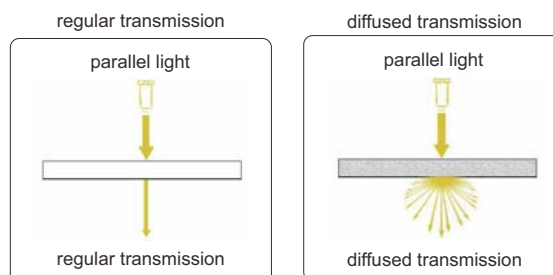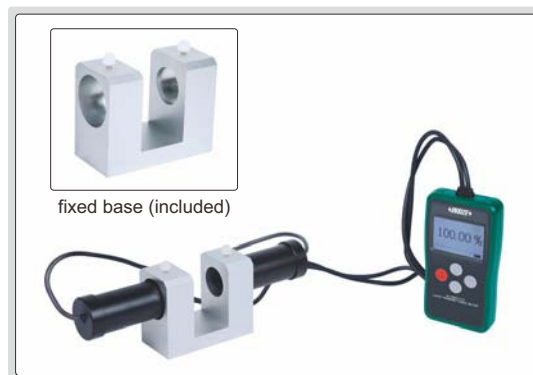
- Suitable for light transmittance testing of various "regular transmission materials", such as building glasses, auto glasses, transparent films, plastic products, etc.
- With the design of parallel optical path of the light source and condensed light of the receiver, it can measure up to 100mm thickness
- Can measure the high transparent materials such as K9 glasses
- Two measuring modes, fixed base and handheld
- Conforming to CIE photopic luminosity function

SPECIFICATION

Optical source	380nm~760nm, conforming to CIE photopic luminosity function
Measuring range	0.001%~99.8%
Accuracy	±1%
Resolution	0.001% (0%~10%) , 0.01% (10%~100%)
Thickness to be measured	<100mm
Diameter to be measured	>10mm
Power supply	4×1.5V AAA batteries
Dimension	75×140×25mm
Weight	634g

regular transmission

parallel light

regular transmission

when the light penetrates a flat and evenly textured transparent material, the light does not change its direction

diffused transmission

parallel light

diffused transmission

when the light penetrates a material with a rough surface or uneven texture, the light spreads out

STANDARD DELIVERY

Main unit	1 pc
Transmitter	1 pc (connect to main unit)
Receiver	1 pc (connect to main unit)
Fixed base	1 pc
1.5V AAA battery	4 pcs

DIGITAL GLASS THICKNESS METER
CODE 5805-GT22

VIDEO

- Laser reflection principle to measure the thickness of glass and internal air layer. Especially suitable for building laminated glasses, hollow glass windows, etc.
- To test the thickness of single layer glasses, multi-layer glasses, two glasses with one cavity, three glasses with two cavities, laminated glasses, laminated insulating glasses, etc.

SPECIFICATION

Measuring range	glass thickness (0~70mm), air layer (0~45mm)
Accuracy	±0.1mm (measuring range≤63mm), ±0.2mm (measuring range>63mm)
Resolution	0.01mm
Display	LCD
Power supply	4×1.5V AAA batteries
Dimension	130×72×33mm
Weight	330g

STANDARD DELIVERY

Main unit	1 pc
Cross screwdriver	1 pc
1.5V AAA battery	4 pcs