Quality | Innovation | Service | Value

DATA TRANSMISSION AND MANAGEMENT

INSIZE CO., LTD.

MEASUREMENT SOLUTION PROVIDER

www.insize.com

V.1 05.2026

About us

INSIZE - Founded in 1995, is a dedicated supplier of measuring instruments. To enable us to serve the world-wide market, we are setting up an INSIZE distribution network on a global basis. INSIZE headquarter is located in China. We have branch companies in Canada, USA, Mexico, Brazil, India, Turkey, Malaysia, Thailand, Vietnam, UAE, Spain, France, Italy, UK, Poland, Czech Republic, Romania, Slovenia, Australia and distributors in over 120 countries. We ensure that wherever you are, our INSIZE products have service and support that are within hands reach. Our dedication to Quality, Innovation, Service and Value has created a worldwide demand for the INSIZE products.

INSIZE

is our standard quality, made in China

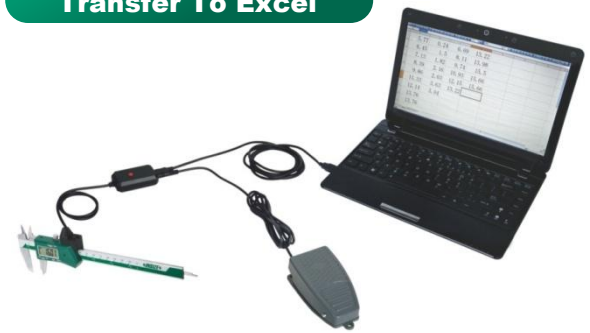
INSIZE PLUS

is our premium quality, made in Europe

Data Transmission And Management — Improve productivity

Supports multiple measurement tools for real-time data collection. One-click transfer of measurement data to Excel, measurement software or mobile APP after measurement. This process is efficient and accurate, and facilitates data management and sharing to improve productivity.

Transfer To Excel

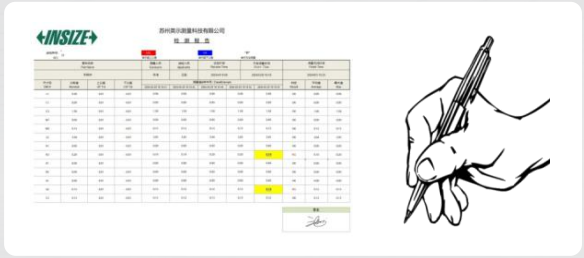


Transfer To Data Management Software

Transfer To Phone APP

Advantages of Data Transmission (P1)

Traditional Measurement



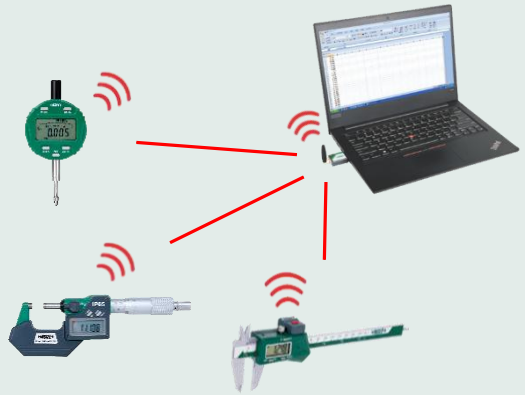
Traditional measurement is manual recording is inefficient, you need to measure and record at the same time; sometimes you need two operators for operation, one to measure and the other to record.

Traditional measurements are made by manually recording data to a paper file or manually entering it into a computer, which inevitably results in recording errors.

Traditional measurements use paper forms, which are difficult to save , circulate and trace at a later stage.

VS

Communication Transfer Data



Timeliness

Data can be transmitted directly to a computer /phone through wired or wireless data transmission, improving efficiency.

Validity

The direct transmission of measurement data to the computer, eliminating human error and ensuring that the data is true.

Paperless

Compared to paper forms, electronic forms of data transmission are more convenient for storage, transferring between each other and later reference.

Advantages of Data Management (P2)

Data Acquisition

Supports multiple data collection methods, compatible with mainstream measuring tools

data transmission | file parsing | screen capture

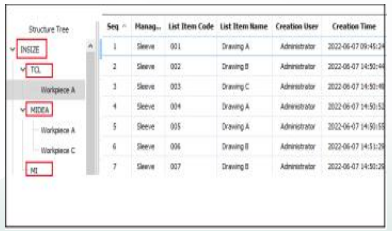
Work Station 1 | Work Station 2 | Work Station 3 | Supplier 1 | Supplier 2 | Supplier 3

OEMs

can be connected with PDM, ERP, MES and other systems

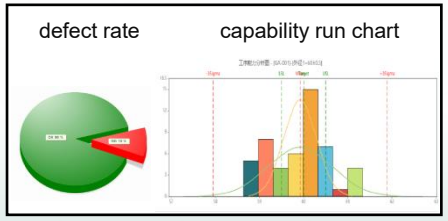
Data Management

Manages measurement data for easy traceability and review.



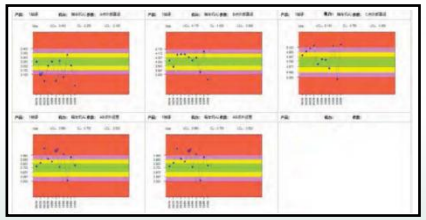
SPC analysis

Analyzes measurement data to identify production inefficiencies and optimize workflows.



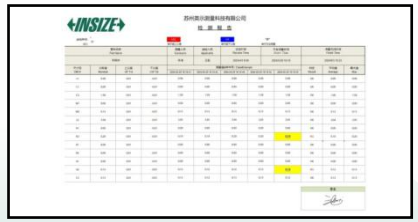
Panel

Real-time monitoring of process quality to address risks promptly.



Reports

Provides inspection reports upon production completion, enhancing quality credibility.



OEMs can conduct random inspections to verify if results align with those from suppliers and ensure full production traceability.

Agenda

01

Wireless Data Transmission

02

Wired Data Transmission

03

Measurement Data Management and Analysis Software

04

Inspection Table

01

Wireless Data Transmission

Wireless Data Transmission System
External Transmitter

- Measuring tool connects to a transmitter to send data , and receiver received data
- Trigger the transmit button of transmitter to wirelessly transfer measurement data to a computer /phone
- Transmission distance : 15m (unobstructed, no electromagnetic interference)
- Customizable AES128 data encryption to enhance data security

Connects to PC/Phone/Tablet

15M

15M

15M

01
Transmitter
Connecting to indicator

transmit button

02
Transmitter
Connecting to micrometer

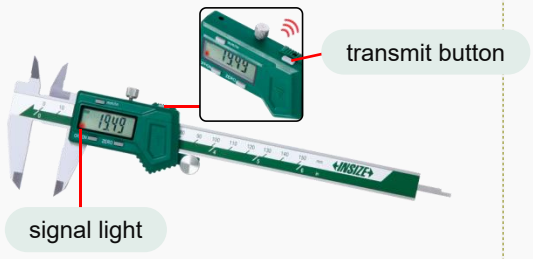
transmit button

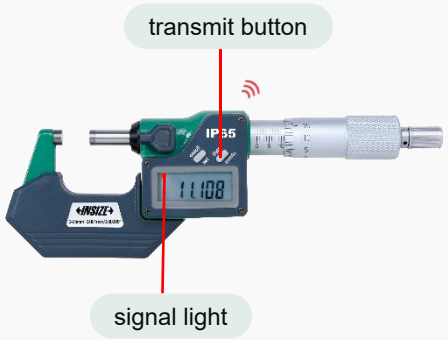
03
Transmitter
Connecting to caliper

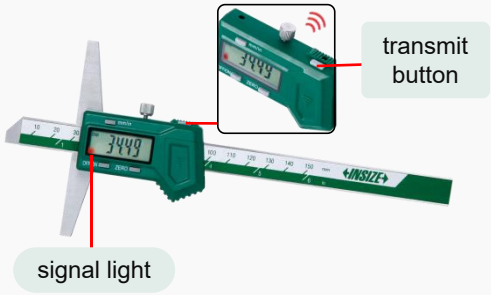
transmit button

Wireless Data Transmission System
Built-in Wireless

- The built-in wireless measuring tool sends data, and receiver received data
- Transmission distance 10m(unobstructed, no electromagnetic interference)
- Trigger the transmit button of measuring tool to wirelessly transfer data to the PC/phone







Receiver

- The receiver connects to the transmitter or built-in wireless measuring tool, receiving data wirelessly.

Single Channel Receiver (Keyboard Signals)

can be connected to 1 transmitter

Multichannel Receiver (Keyboard Signals)

can be connected to 6 transmitters

- For computers and mobile phone with Windows, Android, and iOS system
- Recognized as HID keyboard device, the transmitted data is recognized by computers or mobile phones as keyboard input data and press enter key, such as 12.34 ↙
- No need to install drivers and softwares.
- Data can be transmitted to excel, word, txt etc.
- For any softwares which can receive keyboard signal.

Multichannel Receiver (virtual com port)

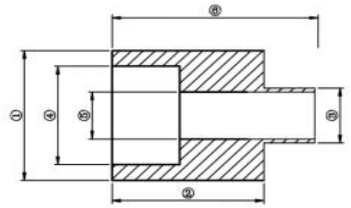
can be connected to 16 transmitters, each has an unique identification code

- For computers with windows system.
- Outputs serial port signals, to be used with software.

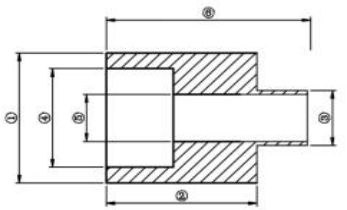
The data entry jump direction can be switched according to needs, either downwards or to the right.
Custom output formats can also be tailored.

Excel Directional Input Software (7315-2 Receiver Included)

- The readings of measuring tools can be transmitted to the designated area of excel, which facilitates data management and improves efficiency.



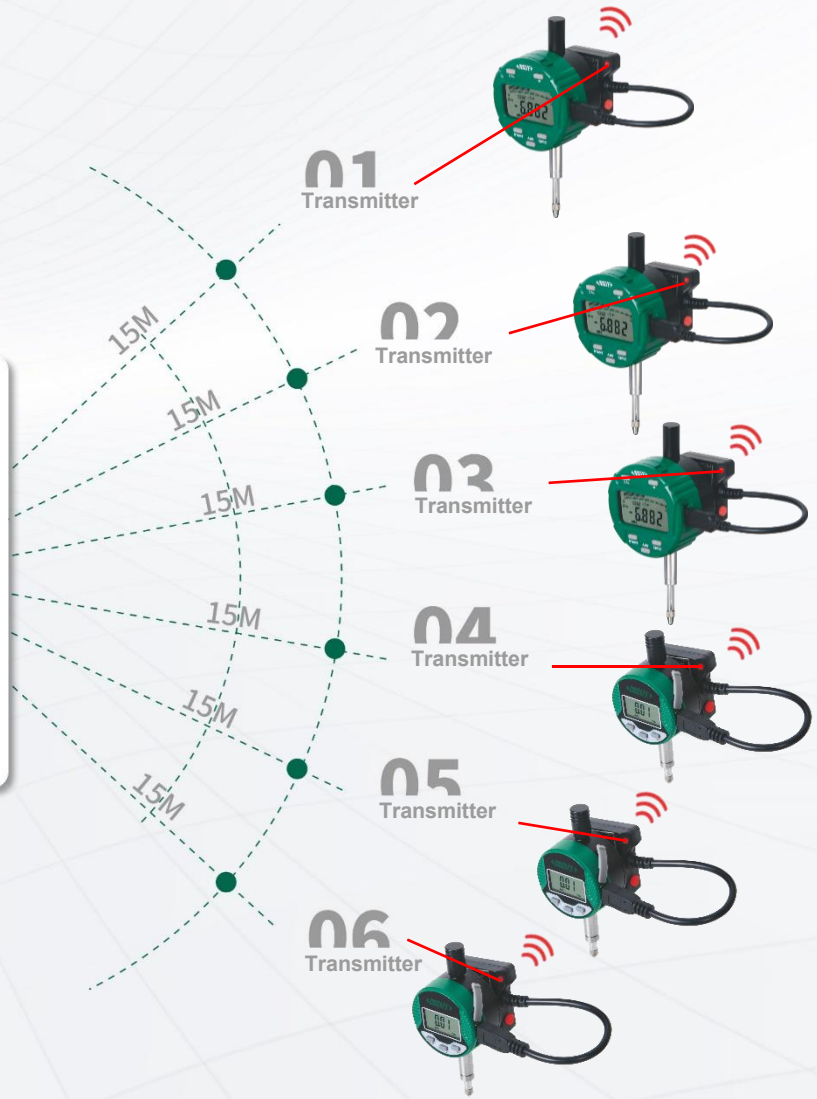
Projects	Extemnal diameter1	Height2	Extemnal diameter3	Intemnal diameter4	Intemnal diameter5
Specifications	60±0.5	45±0.5	21±0.05	30±0.06	15±0.1
Measuring tool	Built-in Wireless Transmission Caliper	Caliper	Micrometer	Bore gauge	Bore Plug Gauge
Transmission Type	Wireless Data Transmission				
1	60.19	45.20	20.967	30.012	14.996
2	60.49	45.24	20.945	30.235	14.996
3	60.13	45.32	20.956	30.145	15
4	60.45	45.22	20.945	30.233	14.996
5	60.45	45.21	20.975	30.141	15
6	60.44	45.08	20.847	30.000	14.993
7	60.44	45.03	20.955	30.056	14.993
8	Channel1 to be written	Channel2 to be written	Channel3 to be written	Channel4 to be written	Channel5 to be written
9					



Projects	Extemnal diameter1	Extemnal diameter3	Height2	Intemnal diameter4	Intemnal diameter5
Specifications	60±0.5	21±0.05	45±0.5	30±0.06	15±0.1
Measuring tool	Micrometer	Micrometer	Caliper	Bore Plug Gauge	Bore Plug Gauge
Transmission Type	Wireless Data Transmission				
1	60.19	20.967	45.20	30.012	14.996
2	60.49	20.945	45.24	30.235	14.996
3	60.13	20.956	45.32	30.145	15
4	60.45	20.945	45.22	30.233	14.996
5	60.45	20.975	45.21	30.141	15
6	60.44	20.847	45.08	30.000	14.993
7	60.44	20.955	45.03	30.056	14.993
8	60.34	Channel1 to be written	Channel2 to be written	30.036	Channel3 to be written
9					

Wireless Data Transmission System of Digital Indicators (Remote control) 7213

- Digital indicator connects to a transmitter to send data, and receiver received data
- Trigger the transmit button of receiver to transfer data from multiple digital indicators to computer/phone



	channel 1	channel 2	channel 3	channel 4	channel 5	channel 6
	A	B	C	D	E	F
1	24.35	0.4045	57.72	1.949	0.4075	0.03568
2	24.45	0.5045	57.82	2.049	0.5075	0.13568
3	26.35	0.4045	57.72	1.949	0.4075	0.00078
4	27.35	0.4045	57.72	1.7575	0.4075	0.0762
5	28.35	0.4045	57.72	1.7575	0.4075	0.0762
6	29.35	0.4045	57.72	1.7575	0.4075	0.07618
7	30.35	0.4045	57.72	1.7575	0.4075	0.55334
8	31.35	0.4045	57.72	1.7575	0.4075	0.61198
9	24.35	0.4045	57.72	1.7575	0.4075	0.6172

The button on receiver is pressed once, the readings of all digital indicators are transmitted

Wireless Data Transmission 7315 -- Advantages

- Transmission distance: 15m (external transmitter), 10m (built-in transmitter).
- Stable data transfer within the effective range, no data loss or errors.
- Point-to-point transfer between measuring tools and collection terminal, with memory after pairing—no need to reconnect.
- Data can be transferred normally after rebooting the computer/phone, no connection required.
- When transferring data, data with ID number is for easy identification of the source.

Wireless Data Transmission VS. Competitor Brands Advantages

01 High Compatibility

Our receivers feature multiple interfaces (USB, Type C, Micro USB, and Lightning), compatible with various system terminals such as computers, tablets, or phones running Windows, Android, or iOS.

02 Comprehensive Coverage

Three product categories: built-in wireless transmitters, external wireless transmitters, and all-in-one transmitters. our wireless data transmission capability comprehensively covers commonly used measuring tools and instruments.

03 Diverse Communication Protocols

Supports both emulated keyboard signals and serial port signals to accommodate varied industrial scenarios.

04 User-Friendly Operation

Simplified device pairing, unpairing, and data transfer processes for effortless setup.

05 Persistent Binding Mechanism

Single-pairing ensures continuous data transmission—no re-pairing required when replacing terminals, instruments, or batteries.

06 Ultra-Low Power Consumption

Operates for over 400,000 transmissions on a single CR2032 battery.

07 Data Format

Supports multiple data fomats: e.g., Value + Enter, Value + TAB, ID number + Value + Enter, etc.

08 Data Security

Optional AES128 encryption for critical data protection.

09 Deep Customization

Provides bespoke data transmission solutions tailored to client specifications.

10 Advanced Analytics Capabilities

Mature supporting software collects, aggregates, and analyzes measuremen t data, enabling streamlined, intelligent, and visualized data management.

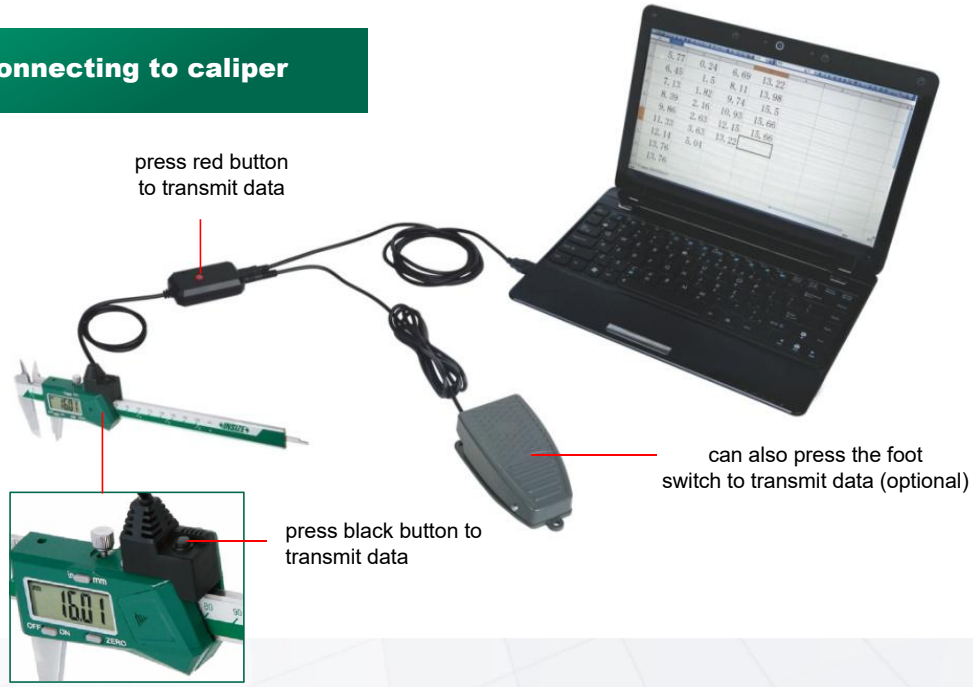
02

Wired Data Transmission

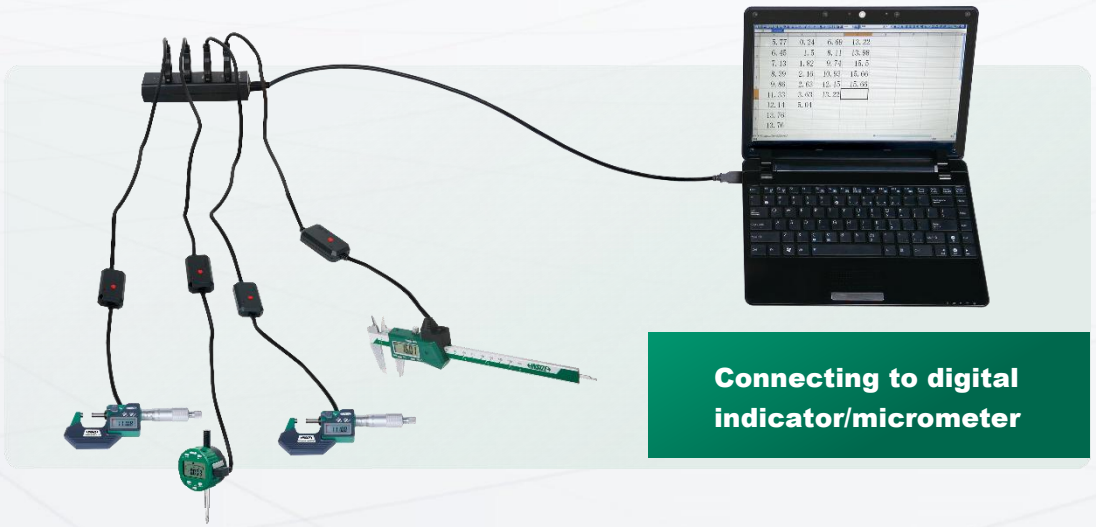
Wired Data Transmission (keyboard Signals) 7302

- Measuring tool connects to the data output cable, and trigger the transmit button to wired transfer data to a computer/tablet

Connecting to caliper



- Recognized as HID keyboard device by computer, no need to install drivers and softwares.
- Data can be transmitted to Excel, Word, txt and other files (press transmit button, which is recognized by the computer as keyboard input data and press enter key, such as 12.34↙).
- For any softwares which can receive keyboard signal.
- Cursor movement direction after data input can be switched (down/right).
- Supports output of ID numbers if needed, e.g., 2023032265 12.34.

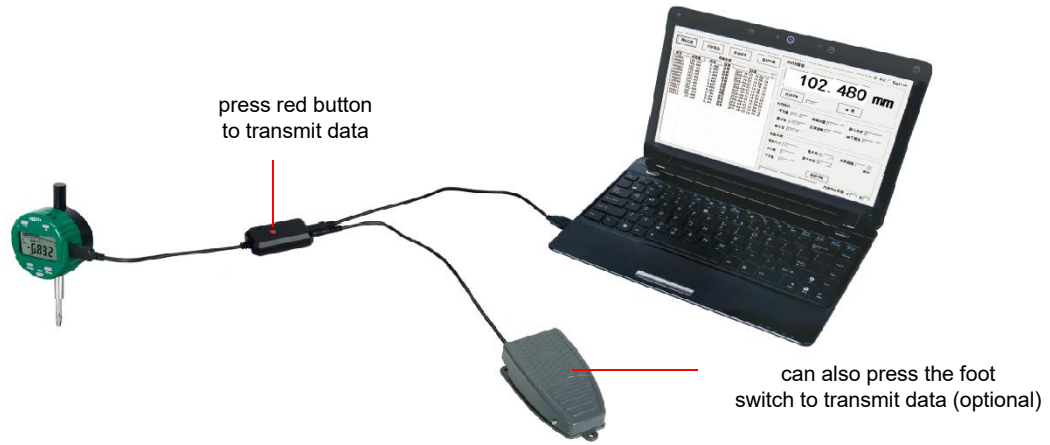


Connecting to digital indicator/micrometer

Wired Data Transmission (Text Format, Virtual Com Port) 7305

- Measuring tool connects to the data output cable, and trigger the transmit button to wired transfer data to a computer
- Output serial signals to transfer data to serial communication software.
- Supports output of ID numbers if needed, can designated area to input data from different measuring tool, e.g., 2023032265 12.34.

Connecting to digital indicator



Connecting to digital indicator/micrometer/caliper

485 Data Output Cables 7215

- Connect the measuring instrument to the data cable, and connect the data cable to the PLC to enable automated control of the measurement data.

Application

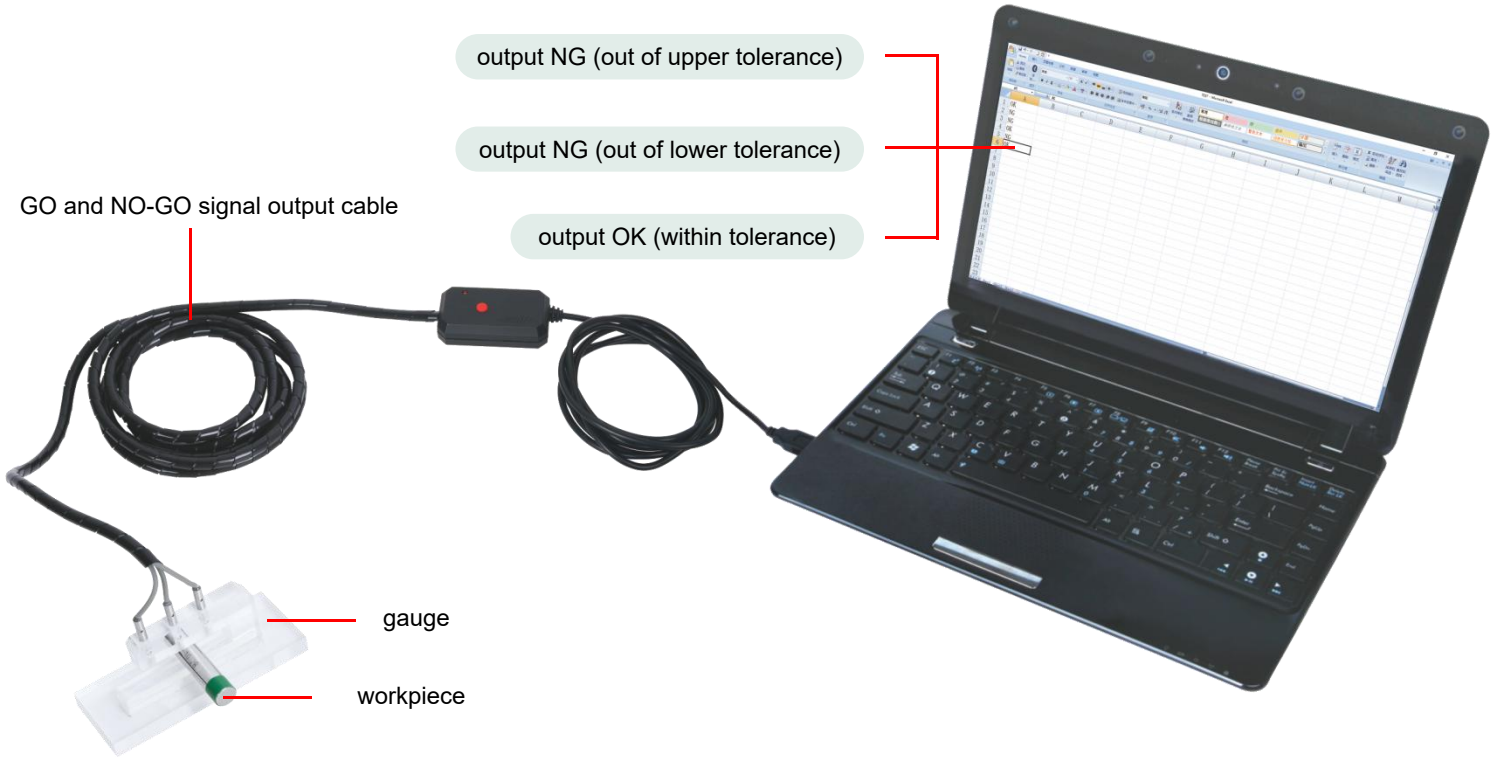
Modbus-RTU Protocol
- Configurable baud rates (9600, 19200, 38400)
- Can set communication address

Wired Data Transmission Comparison

PK	7302 Series(Keyboard Signal)	7305 Series (Serial Signal)	7215 Series (485)
Adapted Terminals	Computers or tablets with Windows, Android, or iOS systems (USB interface supported)	Computers or tablets with Windows system (USB or RS232 interfaces supported)	PLC (Terminal block)
Communication type	keyboard format (suitable for any software or APP which can receive keyboard input values)	text format, virtual com port (a. connection to software that recognizes different channels and IDs according to serial communication protocols and defines data entry area for different measurement tools; b. can also use the included software (included in the 7210-2 interface box) to transfer measurement data from multiple measuring tools to the designated area in Excel for easy data management)	Modbus-RTU protocols (Connecting a PLC for automated data control)
Data Collection Methods	Single key press transmission	Single key press transmission or command transmission or real-time continuous transmission	Command Transmission
Transmission Performance	Wired transmission directly transfers data through physical connections, offering strong anti-interference capability, stable signals, high speed, and good security. It supports high-bandwidth data transmission.		

GO And NO-GO Signal Output Cable 7132 (P1)

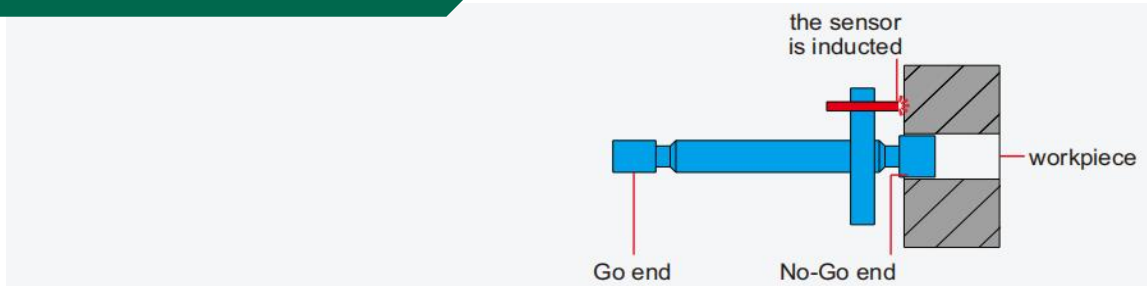
- Connects gauge with signal output cables, automatically judgment and wired transmitting the judgment result OK or NG to the computer.



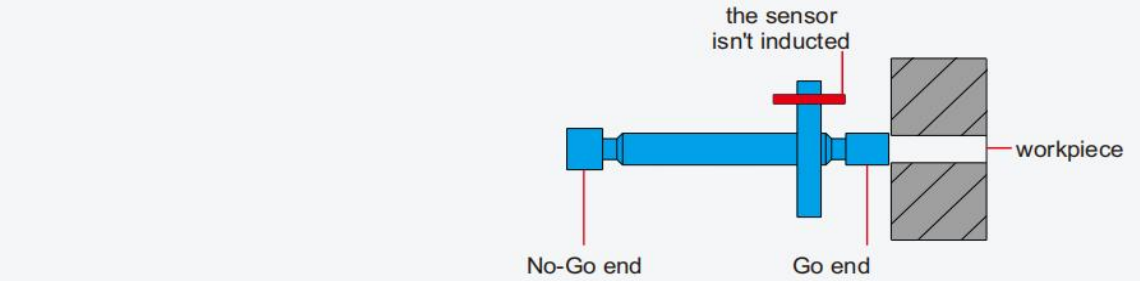
- Suitable for metal workpieces

GO And NO-GO Signal Output Cable 7132 (P2)

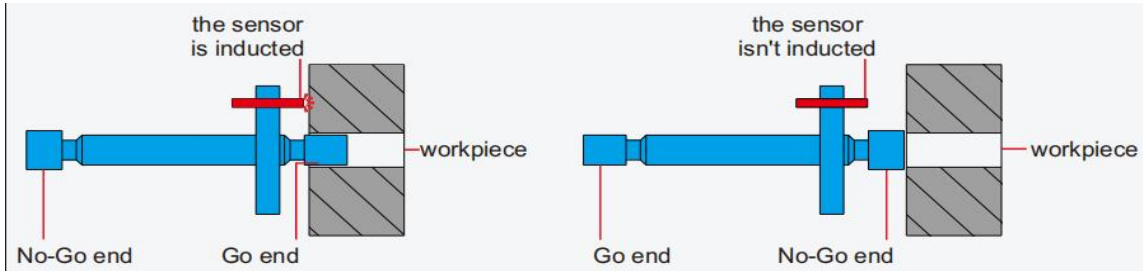
Output cable with two sensors



If the No-Go end of gage can be inserted into the workpiece, it is out of upper tolerance and output NG



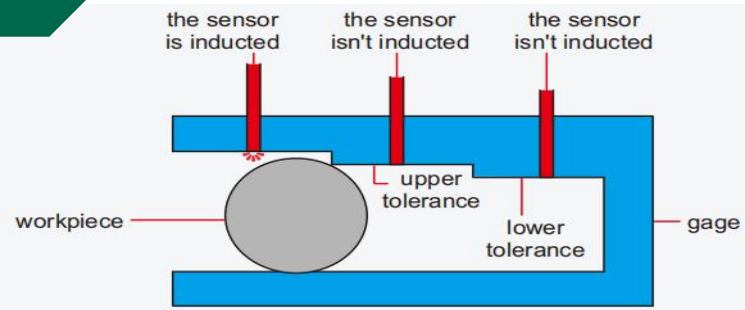
If the Go end of gage cannot be inserted into the workpiece, it is out of lower tolerance and output NG



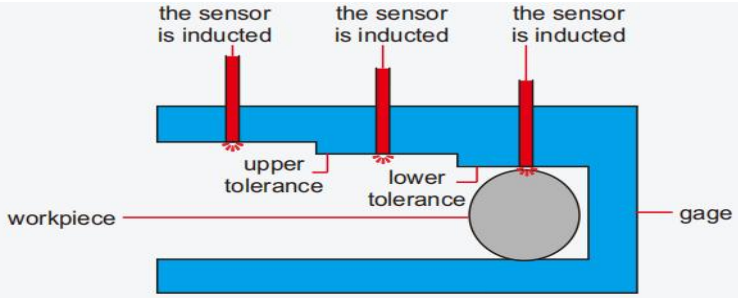
If the Go end of gage can be inserted into the workpiece, but the No-Go end of gage cannot be inserted into the workpiece, it is within tolerance and output OK

GO And NO-GO Signal Output Cable 7132 (P3)

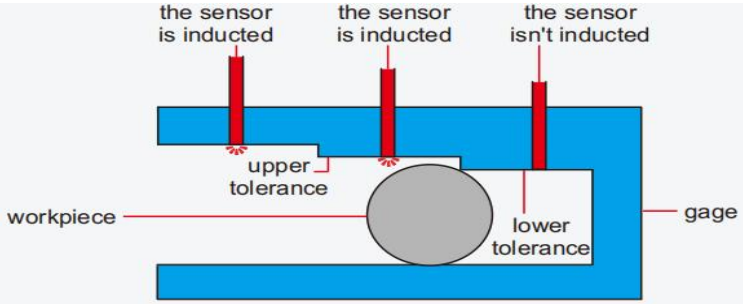
Output cable with three sensors



If the workpiece cannot enter into the upper tolerance section, it is out of upper tolerance and output NG



If the workpiece can enter into the lower tolerance section, it is out of lower tolerance and output NG

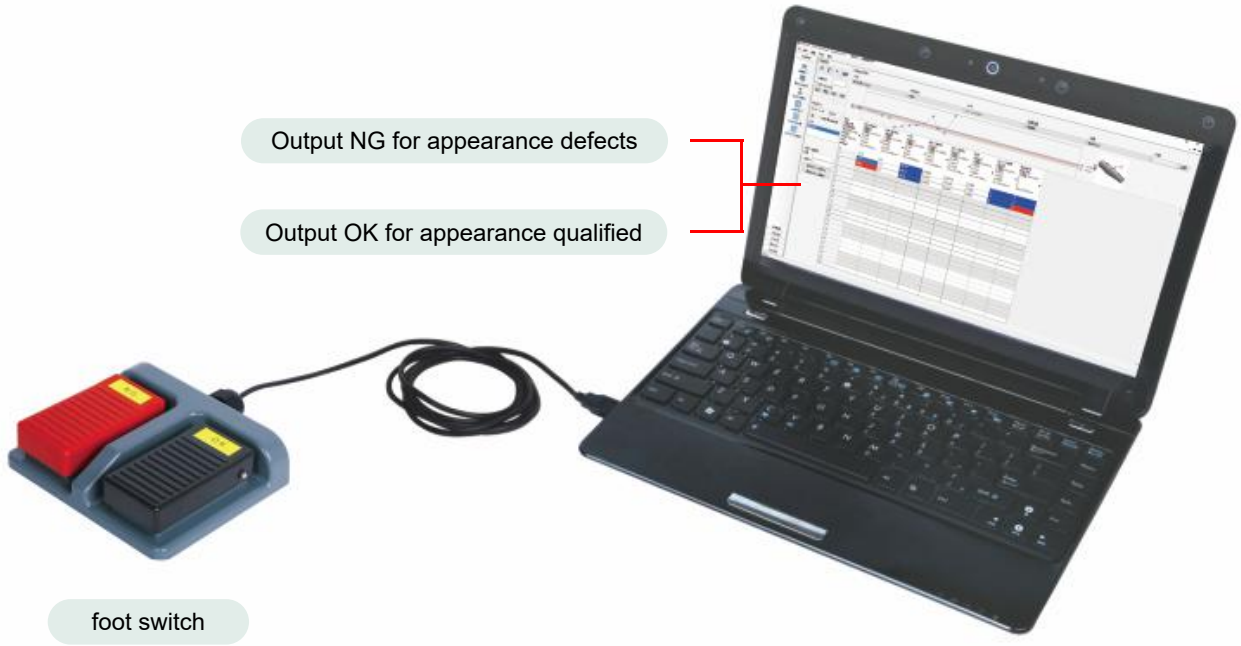


If the workpiece can enter into the upper tolerance section, but the workpiece cannot enter into the lower tolerance section, it is within tolerance and output OK

OK/NG Input switch 7327

- Transmit the OK/NG results to the computer via a wired switch.

hand switch



foot switch

Wired Data Transmission VS. Competitor Brands Advantages

01

Adapted Terminals

- Adaptable to multiple acquisition terminals
  a. Computers or tablets with Windows, Android or iOS systems b. PLC

02

Communication types

- Multiple data communication types to meet various production application scenarios:
  a. (Simulated keyboard signal) Directly transfer data to Excel reports or customer measurement software, MES, or ERP systems
  b. (Output serial port signal) Interface with serial communication software, or transfer measurement data from multiple gauges to the designated area of Excel for easier data management
  c. (485) Can be connected to a PLC to enable automated control of measurement data

03

Data Format

- Supports multiple data formats: e.g., Value + Enter, Value + TAB, ID number + Value + Enter, etc.

04

Special Data Types

- Output the judgment result OK or NG

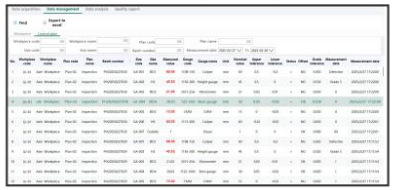
03

Measurement Data Management and Analysis Software

Measurement Data Management and Analysis Software (Basic Version)-- 7349 （P1）

- Automatically collects measurement data from measuring tools (e.g., digital calipers, micrometers, digital indicator , …), analyzes and manages the measurement data to improve production quality.
- Software modules: Measuring tools management, inspection plan, data acquisition, data management, SPC analysis and quality reports

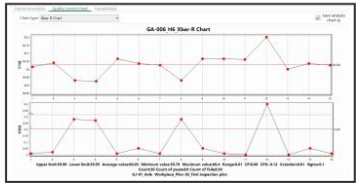
Measuring tools Management



Data management

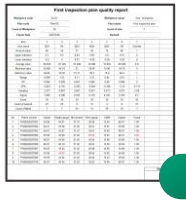
Can be connected with PDM,ERP, MES and other systems

Make inspection plan



SPC analysis

Data acquisition



Quality report

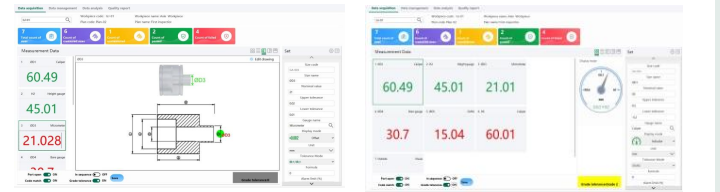
Measurement Data Management and Analysis Software (Basic Version)-- 7349 (P2)

Data acquisition

Support multiple data acquisition methods:
- Manual input: data input with keyboard
- Data transfer: data collection with data output cable

Manual Input

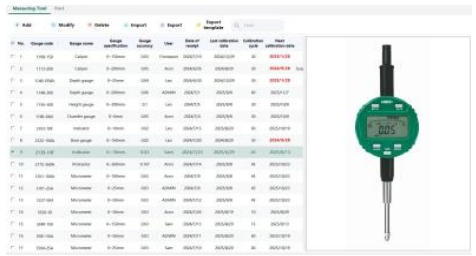
Data Transmission



Drawing-guided measurement, and acquisition data of measuring tools

Measuring tool management

Manage basic information and calibration dates of measuring tools.

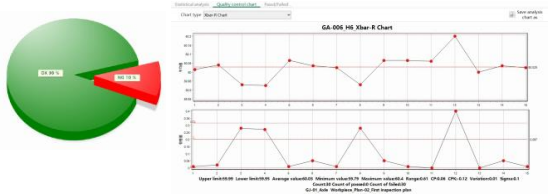


Data Management

Query measurement data (red display for out-of-tolerance) and result status (OK/NG, Rework, UpMax/LowMin).

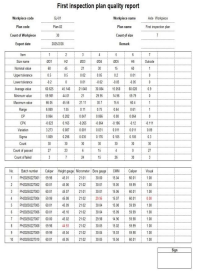
SPC analysis

- SPC Analysis: average, min value, max value, range, Cp, Cpk, variation, sigma, counts of OK/NG.
- Quality Analysis Control Charts: Pie chart, X chart, Xbar-R chart, Xbar-S chart, I-MR chart and Run chart.



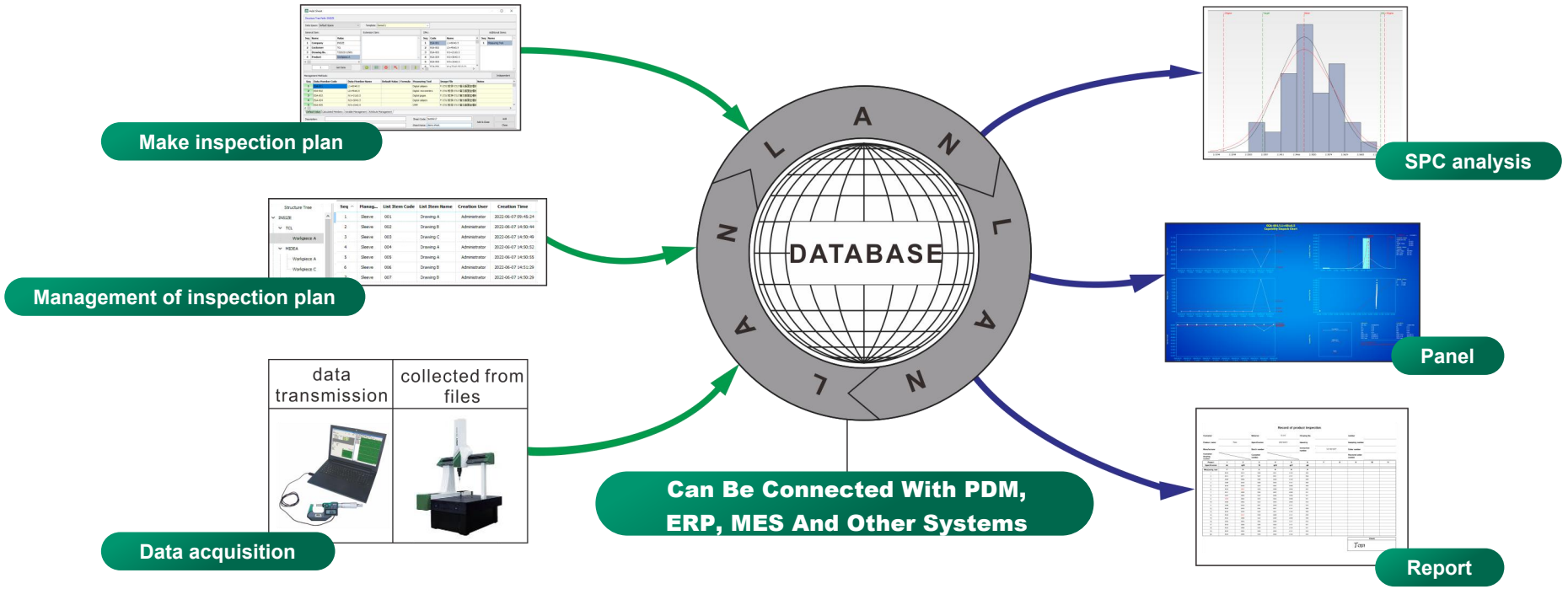
Quality report

Generate quality reports with control plan information, SPC parameters, and measurement data, can export Excel.



Measurement Data Management and Analysis Software -- 7317 （P1）

- Automatically collects measurement data from measuring tools (e.g., digital calipers, micrometers, digital indicator, …)
- Automatically collects measurement data from file of CMM, Vision measuring tools, and other measurement tools.
- Analyze and manage measurement data to improve production quality.
- Software modules: Inspection plan, data acquisition, data management, SPC analysis and panel，quality reports.



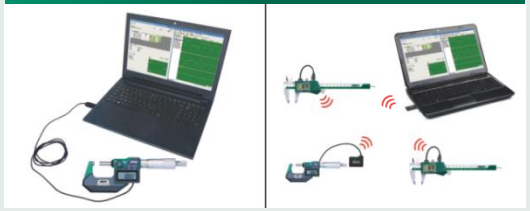
Measurement Data Management and Analysis Software-- 7317 （P2）

Data acquisition

Supports multiple data acquisition methods:
- Manual input
- Data transmission
- File parsing
- Screen capture

Manual input

Data transmission



File parsing

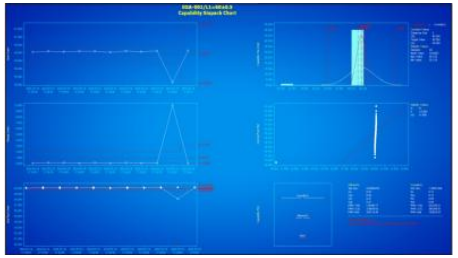
Screen capture

Guided measurement

Guiding the operator to measure follow the inspection plan to reduce human errors such as missed or incorrect inspections.

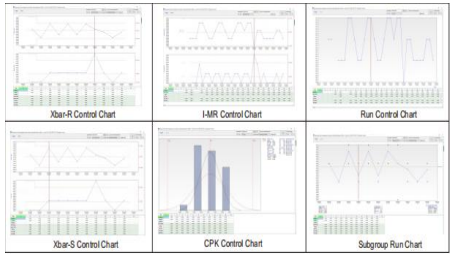
Real Time Monitoring

Quality control personnel can monitor real-time quality status for each process and address risks promptly.



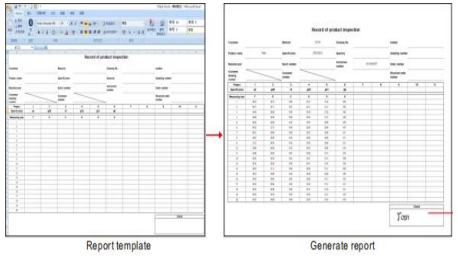
SPC Analysis

Measurement data analysis helps identify engineering limitations and optimize workflows.



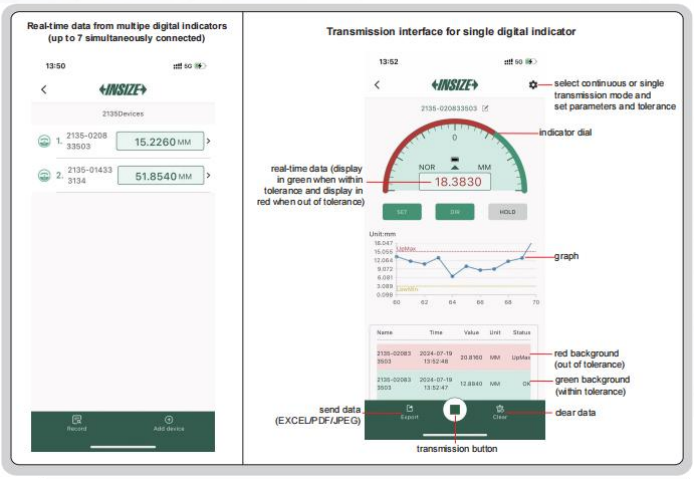
Reports

Quality reports increase quality credibility, reduce acceptance workload, and ensure traceable quality control.



Data Management APP

- Measuring tools connects to the mobile APP by Bluetooth for real-time data collection
- Displays synchronized data with automatic judgment (red display for out-of-tolerance)
- Data trend charts help quickly identify abnormal fluctuations
- Export data as PDF, JPEG, or Excel files
- Transmission distance: 10 meters



04 Inspection Table

Digital Measurement Station -- 7906-06

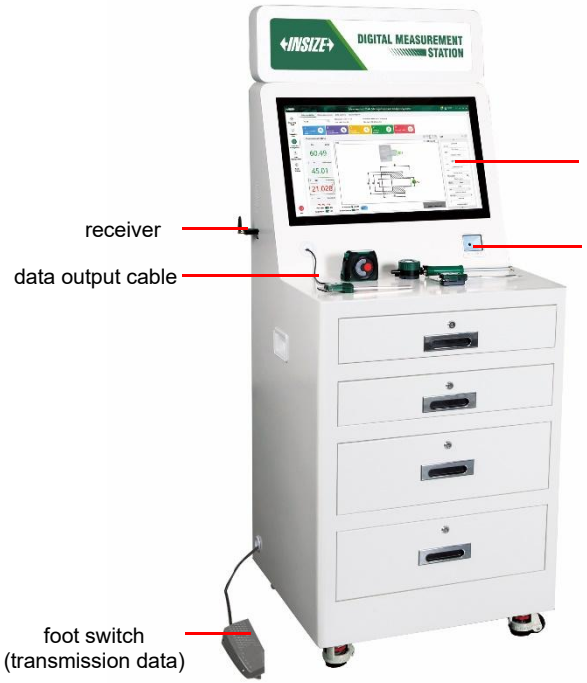
The small and lightweight station is easy to move, and equipped with a 23.6-inch touchscreen computer (i7 CPU&Windows system)

CAN BE CUSTOMILZED

storage drawer
(customizable cavity)

- L×W×H : 650x600x1617mm

Application



Inspection Table

- Customers can choose the suitable inspection table based on different measurement applications.

7901

7911

7923

SPC Inspection Station Case

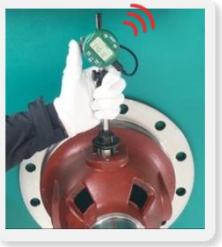
1. Customer needs to quickly measure the inner and outer diameters of automotive differentials.
2. Measuring tools were selected for quick on-site measurements and to minimize human errors: 4653 precision Bore plug gauge, 2186 quick dial snap gauge, and 4659 ring type inner/outer diameter plug gauge.
3. The 7315 wireless data transmission system was selected, and transmit data to the 7317 software.

Ring Outer Diameter Plug Gage 4659-D250g6
(For measuring Ø250g6-0.015/-0.044)

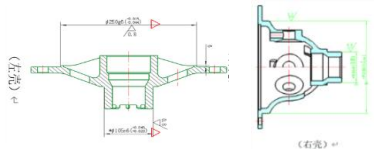
transmitter

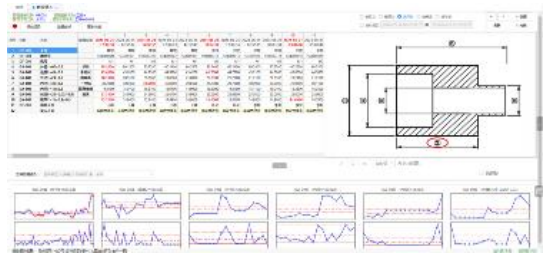
receiver

Dial snap Gage 2186-125/275
(For measuring Ø105n6+0.045/+0.023/ Ø270h7 0/-0.052)



Bore Plug Gage 4653-B34J8
(For measuring Ø34J8+0.024/-0.015)





Using the 7315 wireless transmission system, measurement data is directly transferred to the 7317 software.

THANKS !

Quality | Innovation | Service | Value