

INTERCHANGEABLE HEAD PRESET DIGITAL "CLICK" TORQUE WRENCHES (WIFI LAN)

DATA OUTPUT

INSIZE
CERTIFICATE



IST-WPE100

Torque wrench:

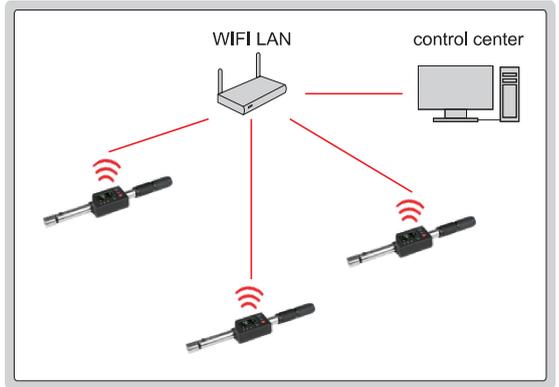
- Clockwise and counter-clockwise operation
- Unit: N.m, cN.m, lb.in, lb.ft, kg.cm, kg.m, oz.in
- Peak and first peak working modes
- Maintain the click audible alarm feature of mechanical wrench
- Mechanical structure adjusts torque value, digital sensor displays real torque value, wrench can be used without torque tester
- Set the angle range to strictly monitor angle of the screw from fitting surface to tightening
- Interval display of curved interface and main interface after unloading, upper and lower tolerance limits can be set to determine pass or fail by LED lights
- Provide torque graph for analyzing and adjusting the tightening strategy
- Scanning module and scanning windows to match corresponding screws
- Open communication protocols for users to develop and interface with factory MES, PLC and other systems
- Automatic zeroing during continuous operation
- Memory of 1000 results and 100 historical review curves
- Auto power off time can be set
- 2 high capacity rechargeable lithium batteries for alternate use



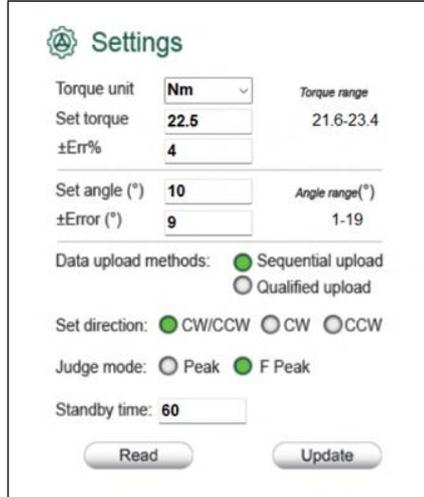
ratchet head (included)



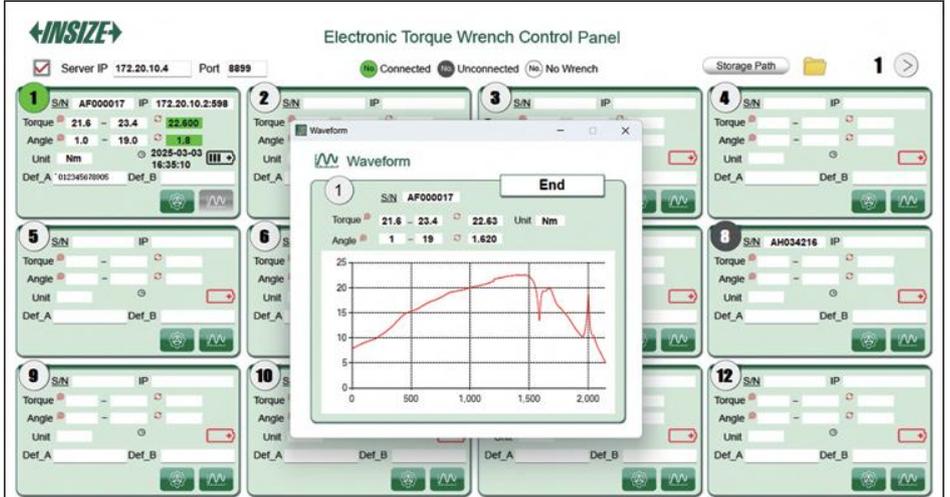
torque adjustment tool (included)



application



parameter setting software (included)



work display software (included)

Software:

- WIFI LAN real-time communication can receive and monitor 24 wrenches at the same time, data can be automatically sent to the centralized control center software
- Parameters can be set and matched directly to the wrench via USB connection to the software
- Can select whether the wrench only sends qualified data after operation (in accordance with the tolerance)
- The data is stored in the wrench when the wrench is disconnected, and the data is automatically uploaded to the computer after wireless connection, or can be uploaded manually through USB connection
- The data in the software is stored in a file with Txt and can be copied and exported to Excel

SPECIFICATION

Part No.	Range	Accuracy		Resolution	Socket size (A×B)	Square driver (D)	Standard effective length (L)	Length	Weight
		Torque	Angle						
IST-WPE10	17.7~88.5lb.in	±3%	±1% of indicated value + ±1° (speed 10°~180°/s) + ±1° (clamping error)	0.01lb.in	.47×.35"	1/4"	8.27"	9.21"	1.15lb
IST-WPE20	35.4~177lb.in			0.1lb.in	.47×.35"	1/4"	8.86"	9.80"	1.21lb
IST-WPE30	53.2~266lb.in			0.1lb.in	.47×.35"	1/4"	8.86"	9.80"	1.21lb
IST-WPE60	88.5~531lb.in			0.1lb.in	.47×.35"	3/8"	11.02"	12.52"	1.94lb
IST-WPE100	14.8~73.8lb.ft			0.01lb.ft	.47×.35"	3/8"	12.76"	14.29"	2.20lb
IST-WPE200	29.6~148lb.ft			0.1lb.ft	.71×.55"	1/2"	17.83"	19.09"	2.95lb
IST-WPE300	44.2~221lb.ft			0.1lb.ft	.71×.55"	1/2"	23.15"	24.41"	3.75lb
IST-WPE400	59.0~295lb.ft			0.1lb.ft	.71×.55"	3/4"	26.30"	27.56"	4.08lb



OPEN END HEAD (optional)

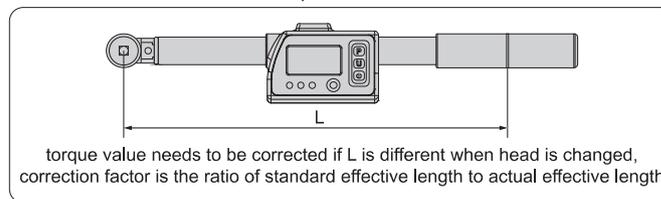
Part No.	Open size	Applicable wrenches	Part No.	Open size	Applicable wrenches
IST-27WM-K4	1/8"	IST-WPE10 IST-WPE20 IST-WPE30 IST-WPE60 IST-WPE100	IST-27WM-K8A	1/4"	IST-WPE200 IST-WPE300 IST-WPE400
IST-27WM-K6	3/16"		IST-27WM-K14A	7/16"	
IST-27WM-K7	7/32"		IST-27WM-K16A	1/2"	
IST-27WM-K8	1/4"		IST-27WM-K18A	9/16"	
IST-27WM-K10	5/16"		IST-27WM-K20A	5/8"	
IST-27WM-K12	3/8"		IST-27WM-K22A	11/16"	
IST-27WM-K14	7/16"		IST-27WM-K24A	3/4"	
IST-27WM-K16	1/2"		IST-27WM-K26A	13/16"	
IST-27WM-K17	17/32"		IST-27WM-K28A	7/8"	
IST-27WM-K18	9/16"		IST-27WM-K29A	29/32"	
IST-27WM-K20	5/8"		IST-27WM-K30A	15/16"	
IST-27WM-K22	11/16"		IST-27WM-K31A	31/32"	
IST-27WM-K24 *	3/4"		IST-27WM-K32A	1"	
IST-27WM-K28 *	7/8"		IST-27WM-K36A *	1-1/8"	
IST-27WM-K32 *	1"		IST-27WM-K40A *	1-1/4"	

* Torque value needs to be corrected for these heads

BOX END HEAD (optional)

Part No.	Open size	Applicable wrenches
IST-27WM-M8	1/4"	IST-WPE10 IST-WPE20 IST-WPE30 IST-WPE60 IST-WPE100
IST-27WM-M10	5/16"	
IST-27WM-M12	3/8"	
IST-27WM-M14	7/16"	
IST-27WM-M16	1/2"	
IST-27WM-M18	9/16"	
IST-27WM-M20	5/8"	IST-WPE200 IST-WPE300 IST-WPE400
IST-27WM-M12A	3/8"	
IST-27WM-M16A	1/2"	
IST-27WM-M18A	9/16"	
IST-27WM-M20A	5/8"	
IST-27WM-M24A	3/4"	
IST-27WM-M26A	13/16"	
IST-27WM-M28A	7/8"	
IST-27WM-M32A	1"	
IST-27WM-M36A *	1-1/8"	
IST-27WM-M40A *	1-1/4"	

torque correction



STANDARD DELIVERY

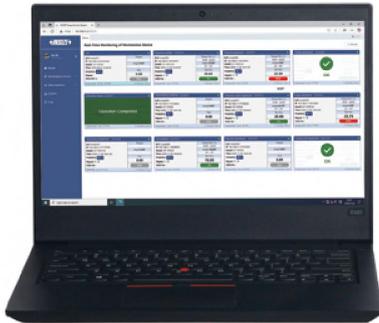
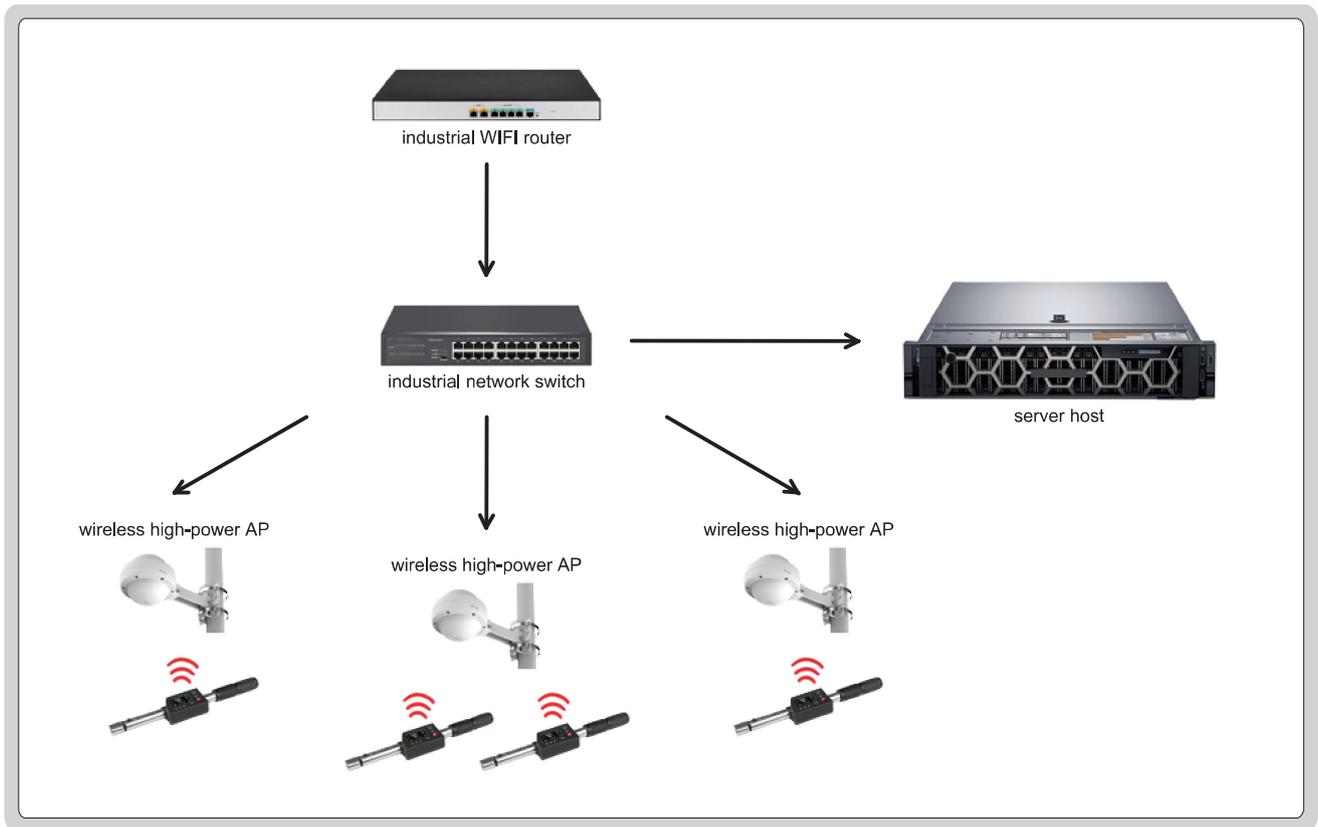
Digital torque wrench	1 pc
Ratchet head	1 pc
Torque adjustment tool	1 pc
Type-C transmission cable	1 pc
Centralized control center software	1 set
Rechargeable lithium battery	2 pc
Lithium battery charger	1 pc

OPTIONAL ACCESSORY

Non-standard wrench heads	customized according to customer requirements
Web framework extension software system	IST-WPE-TS (details refer to next page)

Web framework extension software system (optional)

- Sample framework for usage (all hardware devices are not included)



backend administration console
example: access 192.168.31.2: 9005
server host IPv4 address



operator console
example: access 192.168.31.2: 8080
server host IPv4 address

- **Server configuration requirements:**

Quad-core/octa-core CPU or above;
32GB/64GB RAM or higher;
500GB/1TB hard drive (SSD) or larger;
Linux CentOS 7/CentOS 8 or mainstream server Linux operating system

- **Network requirements:**

WIFI 2.4G/5G wireless network;
Devices are segmented into separate VLAN;
Workstation network and server network are connected normally;
WIFI network signal remains strong, with an average signal strength greater than -65dBm;
Properly deploy industrial wireless high-power access points to ensure seamless signal coverage



server console
(install all software programs required for operation)

- Backend administration console: Provides an advanced management interface that not only delivers all functions of control center software but also enables comprehensive workstation configuration and permission management, and allows for more flexible assignment of torque tools and operator tasks

Labels in the image:

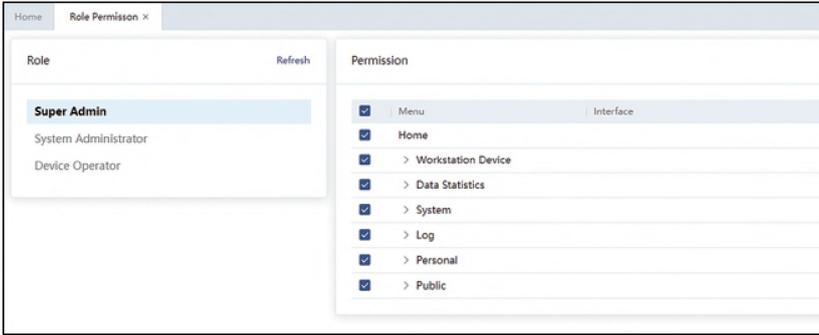
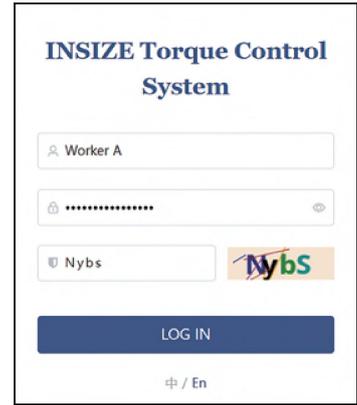
- administrator (points to the top left header area)
- management system catalog (points to the left sidebar)
- real-time workstation operation panel (points to the main content area)

- Operator console: Provides operators with an intuitive panel, enabling them to quickly access task information, scan codes, receive pass notifications, etc. and complete work tasks with high quality

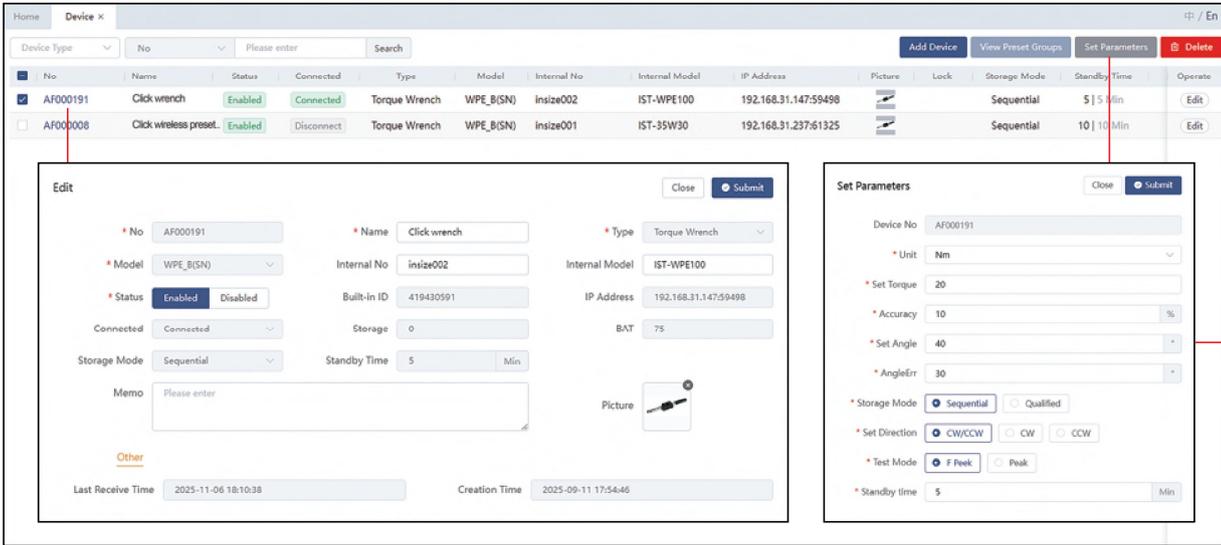
Labels in the image:

- operator (points to the top left header area)
- current screw number (points to the 'Preset No 1/3' indicator)
- tightening tool information (points to the device details table)
- workstation/workstation group information (points to the bottom table)
- visual indicators for tightening positions and sequence: green dots indicate completed; flashing yellow dots indicate in progress; blue dots indicate pending tightening (points to the numbered screws on the cylinder head)
- tightening parameter setting range (points to the 'Qualified Torque Nm' and 'Qualified Angle°' panels)
- tightening data (points to the 'Test Value' panel)
- result determination (points to the 'Check Qualified' button)

- Permission-based management (set accounts and passwords for login permission management):
 Super admins possess all system permissions;
 System administrators possess most workstation management permissions;
 Device operators only have the permissions for operator console and to view their own operational data

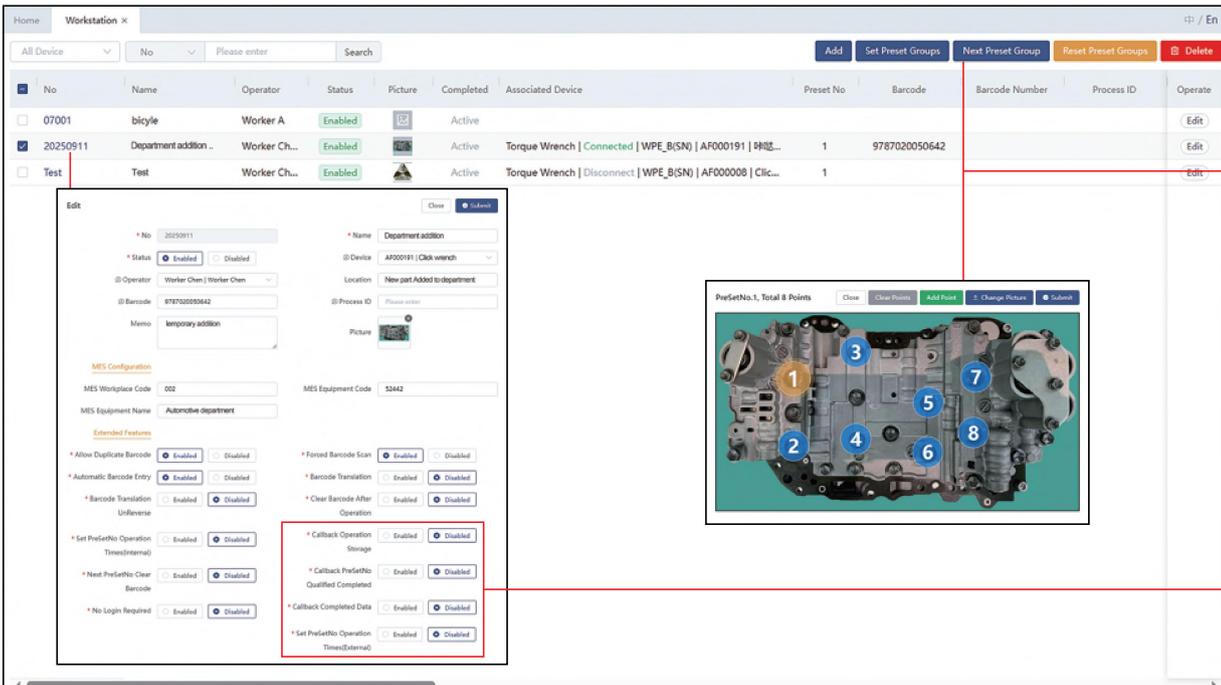


- Device management: Centralized management of torque wrenches for workstation access



administrator control wrench

- Workstation management: Suitable for workstation using a single tightening tool for operation



set workstation tightening parameters

external port for MES integration

- Workstation group management: Suitable for workstation associating device from multiple other workstations for operation

The screenshot displays the 'Workstation Group' management interface. At the top, there are buttons for 'Add Group', 'Set Preset Groups', 'Next Preset Group', 'Reset Preset Groups', and 'Delete'. Below this is a table with columns: No, Name, Status, Operator, Completed, Associated Workstation Device, Current Preset No, MES Workplace Code, MES Equipment Code, MES Equipment, and Operate. A row for workstation 333 is highlighted. Two 'Edit' windows are open. The left window shows 'Workstation Details' with fields for No (333), Name (Automotive division), Status (Enabled), Operator (Worker Chen), and various MES configuration codes. The right window shows 'Workstation Details' with a table of associated devices: 20250911 (Department addition No, Torque Wrench | Connected | WPE_B(SN) | AF0001) and Test (Torque Wrench | Disconnect | WPE_B(SN) | AF0000).

workstation group basic information

associated device by workstation group

- Tightening operation data storage, access and export, each tightening operation records a complete data set

search criteria for data retrieval

The screenshot shows the 'Operation Data' interface. At the top, there are search filters for 'All Workstation', 'All Device', 'Qualified', 'Model', 'Start Date', 'End Date', and 'Barcode'. There are 'Export Excel' and 'Export Icon' buttons. The main table has columns: Operation Time, Unit, Accuracy%, AngleErr, Set Torque, Set Angle, Test Torque, Test Angle, Test ResiVal, Test SepVal, Mode, Ratio, Barcode, Chart, and Qualified. A 'Wrench Application Curve' pop-up window is open, showing a graph of Torque (Nm) vs. time (ms). The graph shows a curve starting at 0, rising to a peak of 20.64 Nm at 20.63 ms, and then fluctuating around 18 Nm. The graph is titled 'Wrench Application Curve' and has a status of 'OK'.

data export

tightening curve