



Excellence Since 1953



WINTERS Product Range for Data Centres

Company Profile



- Corporate office in Toronto, Canada
- Established in 1953
- Sales offices;
 - Canada: Calgary
 - USA: Buffalo & Houston
 - China: Shanghai & Beijing
 - Latin America: Buenos Aires
 - Middle East: Dubai
 - Southeast Asia: Kuala Lumpur
- Stocking distribution partners in over 90 countries
- Large inventory in all Winters locations

History of Winters Instruments

1953 **Founded by** **Erwin Winters** **in Toronto, Canada**



1960 **Year** **–** **Manufacturer of military supply instruments and instruments authorized by the Canadian and US governments**

1980 **Year** **–** **Become the main manufacturer of pressure and temperature instruments in the shipbuilding industry**

1991 **Year** **–** **Winters USA Founded**

1998 **Year** **–** **Distribution network spreads to the world 60 Multiple countries**

2002 **Year** **–** **Winters Asia was established in Shanghai, namely Winters Instrument (Shanghai) Co., Ltd.**

Wholly foreign-owned enterprise, registered in Shanghai Waigaoqiao Free Trade Zone

2006 **Year** **–** **Distribution network has spread to the world 80 Multiple countries**

Up to date **–** **Distribution network has spread to the world 90 Multiple countries**



Company Profile

Winters Instruments Headquartered in Toronto, Canada

2016 Annual Global Sales 300 million US dollars, covering the world 90 Multiple Countries

- **Winters Headquarters in Toronto, Canada**
- **Winters Calgary Branch, Canada**
- **Winters New York Branch**
- **Winters Houston Branch**
- **Winters Latin America Branch**
- **Winters Asia Pacific Branch**
- **Winters Middle East Branch**



Global Distribution

Serving You Globally

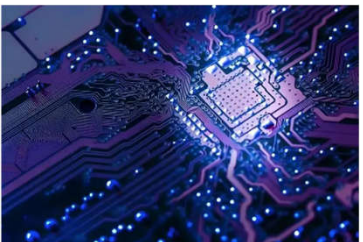


Buenos Aires • Buffalo • Cape Town • Durban • Houston • Johannesburg • Manchester • Shanghai • Toronto

Industry Customers



Industry Customers



Nestlé



Certification Standard

Int'l Org. for Standardization (ISO)

Quality assurance, system improvements



ISO 9001:2008

Canadian Registration Number (CRN)

Design approval for pressure



CRN

Underwriters Laboratories (UL)

Commitment to safety and continuous improvement



Conformite Europeene (CE)

Conformance to specified European standards, electronics



Canadian Standards Association (CSA)

Canadian standards for product quality and safety



Certification Standard

Factory Mutual (FM)

Safety and reliability in hazardous locations



3-A Sanitary Standards

Conformance to standards for dairy/sanitary Processing



Explosion proof

Equipment used for Hazardous and Explosive Environments



Fluid Components Int'l (FCI)

Highest installed accuracy in process control



FCI

Certification Standard

National Electrical Manufacturers Association

(NEMA)

Enclosures for harsh corrosive/contaminating
Environments



NEMA

Various Public Agencies

Strict government requirements



Dept. of National Defence (CND)
US Dept. of Defense
US Coast Guard
US Navy, NATO

National Assc. Of Corrosion Engineers (NACE)

Design and construction with corrosion control



Restriction of Hazardous Substances Directive

(RoHS)

Restricts the use of 6 hazardous materials in the
manufacturing of electronic devices





Winters Product Categories

Winters all product designs and manufacturing comply with international standards, including but not limited to SEMI, IEC, ISO, CE, CSA, ATEX The product's technical parameters and quality requirements meet or exceed the product standards of first-line brands in the international industry, and the product compatibility can fully meet the application requirements of different industries.

Pressure Instruments

- pressure/Differential pressure sensor
- Mechanical pressure/differential pressure gauge
- pressure switch
-



Temperature Instrument

- Mechanical thermometer
- Thermal resistor RTD
- Thermocouple sensors
-



Flow Meters

- Mass flow meter
- Electromagnetic flowmeter
- Vortex flowmeter
- Ultrasonic flow meter
-



Level instrument

- Radar level meter
- Ultrasonic level meter
- Magnetic flap level gauge
- Tuning fork switch
-



Temperature and humidity instrument

- Temperature and humidity sensors
- Dew point sensor
-



Data Centres Product Applications

The systems involved in the Data Centres include:-

- 1. Cooling water monitoring system**
- 2. Environmental Monitoring**
- 3. Liquid Level monitoring of Diesel Storage Tanks and
Diesel Generator Systems (Backup Power)**
- 4. Coolant Distribution Unit (CDU)**

Cooling Water Monitoring System

Cooling water monitoring system included as following products:

- 1. High-precision temperature transmitter**
- 2. Flow Meter/ Energy BTU Flowmeter**
- 3. Pressure Sensors**
- 4. Pressure gauge**
- 5. Thermometer**

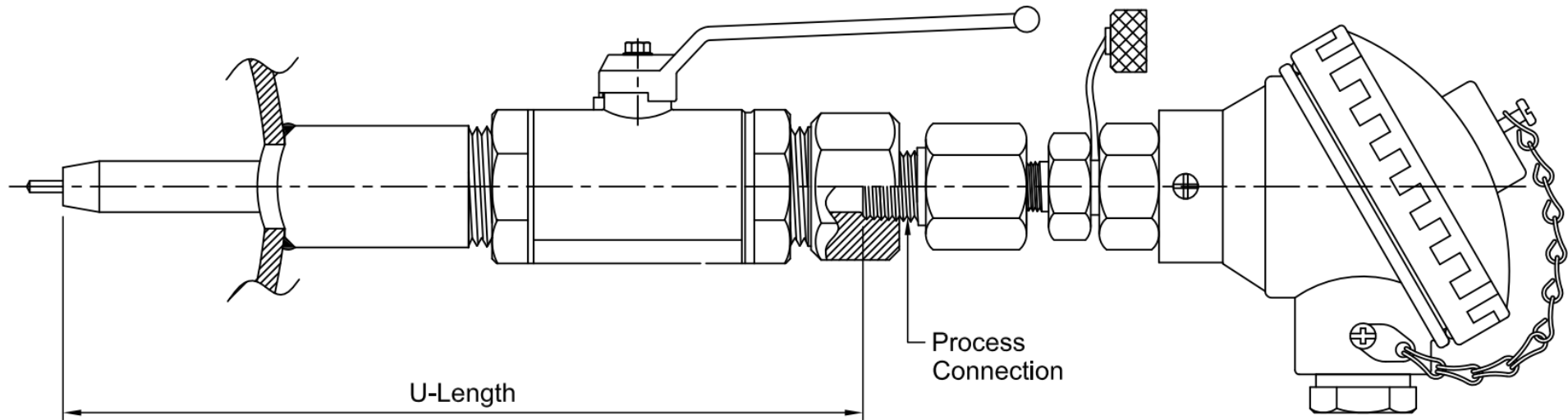
Temperature measurement



TER Series - High-Precision Temperature Transmitter

- Using high precision RTD sensor, 4Wire system to maximize accuracy
- Real-time calibration of the entire temperature range, with maximum detection 10 Points
- The measurement error is $\pm 0.05^{\circ}\text{C}$
- We can provide pairing service, the relative error between the two transmitters is $\pm 0.03^{\circ}\text{C}$
- Optional on-site LCD or LED Display
- Special probe design, the outer diameter of the temperature measuring part is 4mm, which can greatly improve response time

Temperature measurement



- 1: Direct contact between the medium and the temperature sensor speeds up the temperature measurement rate and improves the accuracy.
- 2: With a ball valve to prevent water leakage when replacing the temperature sensor.

Temperature measurement

   中国认可 国际互认 校准 CALIBRATION CNAS L0134 校准证书编号: 2022E11-10-3823807001 Calibration certificate series No. 				
校准结果/说明: Results of calibration and additional explanation				
Temperature	Output Value	Error		Uncertainty
温度点 (°C)	理论输出值 (mA)	测量误差 (mA)	(°C)	扩展不确定度 $U(^{\circ}\text{C})(k=2)$
0	4.000	-0.001	-0.01	0.08
50	12.000	0.003	0.02	0.08
100	20.000	-0.004	-0.02	0.08
绝缘电阻: 100MΩ insulation resistance				

Calibration
Final Result

Ultra-high precision, comprehensive error
can be achieved $\pm 0.05^{\circ}\text{C}$

Bimetal Thermometer

TBM Series – Bimetal Thermometer (oil-fillable available)



- The housing and probe are made of stainless steel and can be used in corrosive environments
- Temperature range: -70-70°C to 100-550°C
- A variety of installation methods are available, including axial, radial and All angle
- The meter head can be filled with oil to resist shock and can be installed in vibrating places
- Dial size: from 1" (25mm) up to 6" (150mm) Optional
- Insertion stem length: from min 2.5" (65mm) up to 60" (1500mm)

Electromagnetic flowmeter/ Energy BTU Flowmeter



LMF11 Series - Flowmeter/ Energy BTU Flow Meter

- Output signal: 4-20mA, pulse, frequency, 4 to 20mA + HART
- Communication: Modbus RS485
- Pipe diameter: DN10-DN2000
- Flow rate range: 0.1m/s-10m/s
- Dielectric conductivity: 5 μ S/cm
- Product accuracy: 0.5%FS (standard), 0.3%FS, 0.2%FS (Optional)
- Electrode material: 316L, Hastelloy C, titanium, tantalum and other special materials
- Lining material: Hard Rubber, PTFE

An energy BTU meter generally consists of three parts:

1. Electromagnetic flowmeter
2. 1 pair (2 x Temperature sensor, usually high precision Pt100 or Pt1000)
3. Energy calculator

Ultrasonic flow meter / Energy BTU Meter

FUS1 Series - Ultrasonic flow meter/ Energy BTU Meter



- The output signal is 4-20mA, pulse or RS485
- The installation method is Clamp On type, which is simple and convenient to install and without require pipe cutting
- Applicable pipe diameter: DN25 to DN1200
- Measuring range: 0.03m/s to 5m/s
- Supply voltage: 10-36VDC
- Measuring accuracy: 1%FS
- Maximum temperature of flow sensor can stand up to 130°C
- Optional for 1 pair Temperature sensors (Pt100) composed to Energy BTU meter.

Handheld Ultrasonic Energy Meter

FUS6 Series - Handheld Ultrasonic Flow Meter



- The installation method is magnetic guide rail type, which is simple and convenient to install and the measurement is stable
- Applicable pipe diameter: DN25 to DN1200
- Measuring range :0.01m/s to 12m/s
- Power supply: rechargeable battery, battery capacity 3000mAh
- Measuring accuracy: 1%FS
- Maximum temperature of flow sensor can stand up to 130°C
- Handheld LCD Display screen for easy reading of measured values

Pressure Transmitter

LVB - Pressure Transmitter

- The pressure transmitter adopts slightly soluble glass core, high overpressure and high burst pressure.
- Built-in damping structure, high resistance to resist vibration, impact and water hammer effect
- 3 times full scale overpressure, 5 times full scale burst pressure
- Measurement accuracy 0.5%FS
- Compact structure, suitable for applications with limited installation space
- Pressure Sensor and base are integrated in one body, without any risk of leakage
- Measuring range 0-6bar to 0-2000bar
- Built-in short circuit protection and reverse polarity protection



Differential Pressure Transmitter



Differential Pressure range:

0 ~ 35kpa up to 0 ~ 3.5Mpa

Accuracy: $\pm 0.5\%$

Output signal: 4 to 20mA, 2 wires

Power supply: 12-30 VDC

Process connection: 1/4" NPT, G 1/4",
1/2" NPT, Female or Male

Pressure Gauge



PFQ Series - Pressure Gauge (oil-fillable)

- The housing is made of stainless steel, and the wetted parts can be brass or stainless steel
- Pressure range: 0-1bar to 0-600bar
- The meter head can be filled with oil to resist shock
- Product Accuracy: 1.6% (4" Dial); 2.5% (2.5" Dial)
- Dial size: 63 (2.5"), 100mm (4")

Pressure Gauge

PFP Series - All Stainless Steel Pressure Gauge



- Laser welding of housing and connectors
- Dial size: 2.5" to 6"
- Measuring range: 0-0.6bar to 0-1600bar
- In response to the safety requirements of the petrochemical industry, our company PFP Pressure gauge 4" and 6" Rear release hole and safety glass as standard
- Optional patented technology of our company StabiliZR™ The movement makes the watch head shock-resistant even without oil filling
- Pressure gauge accuracy: 1.6%FS (2.5") or 1.0%FS (4" and 6")

Pressure Gauge Technology

StabiliZR™ Gauge

Dry gauge(s), come with dampened movement that eliminates pointer flutter caused by vibration and pulsation.



Benefits

- ✓ No oil leakage problems
- ✓ Can be use in oil-free applications
- ✓ Temperature up to 100°C
- ✓ No discoloration issue
- ✓ Light weight, save transportation cost
- ✓ Short response time





Excellence Since 1953

StabiliZR™

(Dampening Movement)



Examples of Winters StabiliZR
can be found on YouTube

Video includes 3 Winters
gauges on a vibrating pump:

- standard dry gauge
- glycerin filled gauge
- StabiliZR gauge

Environmental Monitoring

Environmental monitoring includes as following:

- 1. Temperature**
- 2. Temperature and Humidity**
- 3. Dew point**
- 4. Carbon monoxide (CO)**
- 5. Carbon Dioxide (CO₂)**
- 6. Freon, Ozone, Hydrogen, etc.**
- 7. Low Differential Pressure**
- 8. Air volume**
- 9. Water Leakage detection**

Temperature Sensor



ET3T Series - Digital temperature sensor

- Shell PC Material: The probe rod is made of stainless steel
- Come with LCD Display
- Product accuracy: $\pm 0.2^{\circ}\text{C}$
- Multiple installation options available: Panel installation, Pipe installation or Remote transmission
- Measuring range: $-50-200^{\circ}\text{C}$
- Protection level: IP65

Temperature and Humidity Sensor



ERH1 Series - Temperature & Humidity Sensor

- Shell PC Material, Probe rod is made by PC or stainless steel
- Built-in Dip switch, adjust the temperature range by Dip switch without any tools
- Product accuracy: 3% (Humidity), 0.5°C (Temperature)
- A variety of installation options, Wall Mounted or Duct Mounted
- Measuring range: 0-100%RH; -40-120°C
- Protection level: IP65
- Available OEM custom made

Temperature and Humidity Sensor

ERH5 Series - Temperature/Humidity sensor with LCD Display



- Shell PC Material, probe rod is made by PC or stainless steel
- Built-in Dip switch, adjust the temperature range by Dip switch without any tools
- Come with LCD Display with backlight
- Product accuracy: 2% (Humidity); 0.3°C (Temperature)
- A variety of installation options, Wall Mounted or Duct Mounted
- Measuring range: 0-100%RH' -40-120°C
- Protection level: IP67

Dew point Sensor



EDP Series - Dew Point Sensor

- Housing made of anodized aluminum or stainless steel
- The measuring sensor adopts polymer film capacitor technology, with fast response time and high stability
- Product measuring range: -60-60°Ctd
- Up to 10+ Dew point calibration and Temperature compensation, Product Accuracy $\pm 2^{\circ}\text{Ctd}$, The highest optional 0.5°Ctd
- Can output signal: 4-20mA or RS485
- Anti-condensation, anti-particulate pollution, oil vapor and most chemical corrosion

Dew point Sensor

EDS Series - Dew Point Sensor with Digital display



- The shell is made by aluminum oxide
- The measuring sensor adopts polymer film capacitor technology, with fast response time and high stability
- Configuration 1.5" Capacitive touch screen, ultra-wide viewing angle, easy to read
- The lowest dew point that the product can measure is -110°Ctd
- Integrated pressure measurement, can output pressure dew point and atmospheric dew point simultaneously
- Up to 10+ Dew point calibration and temperature compensation, Product Accuracy $\pm 2^{\circ}\text{Ctd}$
- Can output signal: 4-20mA or RS485
- Anti-condensation, anti-particulate pollution, oil vapor and most chemical corrosion

Gas Concentration Sensor

ECO1 Series - Carbon Monoxide Sensor (CO)



- The measuring range is 0-1000ppm
- The product accuracy is 5%FS
- The minimum resolution is 1ppm
- Output signal: 4-20mA or RS485
- Compact structure, easy installation
- The protection level is IP54

Gas Concentration Sensor

ECO2 Series - Carbon Dioxide Sensor (CO2)



- The measuring range is 0-2000ppm, 0-5000ppm or 0-10000ppm
- The product accuracy is 2%, 3% and 5%
- The minimum resolution is 1ppm
- Output signal: 4-20mA or RS485
- Compact structure, easy installation
- It has the ability to resist pollution and dust, and can adapt to long-term high-concentration environment applications

Gas Concentration Sensor

GDS Series - Explosion-proof Gas Detector



- Can measure a variety of gases: Ozone, Freon, Hydrogen Sulfide, hydrogen, etc.
- The detection method is diffusion type, the principle includes catalytic combustion or electrochemical
- Come with OLED On-site display and Optional Buzzer and Alarm light
- Output signal: 4-20mA
- The installation method is wall mounted
- Standard cast aluminum junction box, explosion-proof grade ExdIIC T6

Differential Pressure Gauge (For Low Air)



PFD WinAir - Low Differential Pressure Gauge

- Suitable for air conditioning, commercial/ Measurement of low pressure and low non-aggressive gas differential pressure in industrial Filters, Clean rooms, Air outlets, Vacuum and other applications
- The housing is made of cast aluminum, with a diameter of 100mm
- Pressure range: -50 to 50pa, 0-60Pa to 0-30kPa
- Product Accuracy: 2.5%
- Maximum withstand pressure up to 100kPa
- External zero point adjustment knob

Differential Pressure Transmitter (For Low Air)



LFD Series - Low Differential Pressure Transmitter

- Differential pressure range: -30...30Pa to -5kPa...5kPa
- Measurement accuracy: 1%(>60Pa) or 2%(≤60Pa)
- Can be battery powered or externally powered 24V power supply
- Output Signal: 4 to 20mA (Remark: Only apply for 24VDC external power supply)
- Come with LCD Display, can read the pressure value on site
- Zero adjustment can be done by pressing the button
- Can only measure clean gas, generally used in clean rooms or ventilation ducts

Differential Pressure Switch (For Low Air)



WPS Series - Low Differential Pressure Switch

- Applicable occasions and PFD Consistency
- Pressure Range: 20-200Pa to 1-4kPa
- Switch contact range: 1A 250VAC or 0.1A 24VDC
- Switch type: SPDT
- The housing and wetted parts are made of PP Material
- Can only measure clean gas, generally used in clean rooms or ventilation ducts

Air Volume Sensor

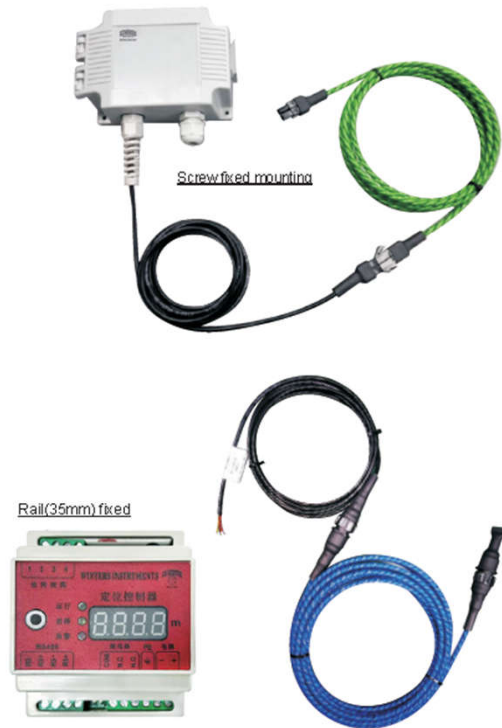
AW Series - Air Flow Sensor

- Wind speed range: 0...1m/s to 0...40m/s Optional
- Output signal :0-10V, 4-20mA or MODBUS protocol
- Supply voltage: 220VAC or 24VDC
- Measuring accuracy: $\pm(0.2\text{m/s} + 3\% \text{ Current wind speed})$
- Probe working humidity 5..95%RH (No condensation),
generally used in clean rooms or ventilation ducts
- Optional on-site display, probe length can be customized
according to needs



AW60R带液晶显示款

Water Leak Sensor



LPD Series - Water Leak Sensor

- Using the principle of liquid conductivity, when leaking liquid drops on the sensor, an alarm signal will be issued
- Output: Relays, RS485
- Cable PTFE + Conductive polyethylene
- Longest cable: up to length 200m
- Switch contact capacity: 1A 30VDC or 0.5A 125VAC

Liquid Level Monitoring

Liquid level monitoring includes as following:

- 1. Magnetic Level Gauge**
- 2. Submersible Level Transmitter**
- 3. Liquid Level Switch**
- 4. Differential Pressure Level Transmitter**

Liquid Level Monitoring



WMB - Magnetic Level Gauge

- Using the principle of communicating vessels, the current liquid level can be displayed in real time without power supply
- Pressure rating from vacuum to maximum up to 420bar
- Medium temperature from -196°C to the highest 450°C
- Optional magnetostrictive level gauge output 4-20mA, Magnetic switch output can also be selected
- Maximum length can be made up to 6 meters

Backup Power (Diesel Generators)



Backup Power (Diesel Generators):

WM Magnetic Level Gauges ensure continuous fuel level monitoring, critical for power safety during emergencies and sustaining 24/7 operations.

Liquid Level Monitoring



LY25 Series - Submersible Liquid Level Sensor

- Both the housing and the sensor are made of 316LSS Material, more corrosion-resistant
- Measuring range: 0...0.1bar to 0...20bar
- Product accuracy: 0.5%FS or 0.25%FS
- The protection level is IP68 EN60529
- A variety of cable materials are available, including PTFE, silicone, PFA
- Probe outer diameter 28mm

Liquid Level Monitoring



LY30 Series - Submersible Liquid Level sensor

- PTFE Housing, ceramic sensor, specially designed for corrosive media
- Measuring range: ...0.02 bar to 0...20bar
- Product accuracy: 0.5%FS or 0.25%FS
- The protection level is IP68 EN60529
- A variety of cable materials are available, including PTFE, silicone, PFA
- Probe outer diameter 46mm

Radar Level Transmitter

LRD10X Series - 120GHz Radar Level Transmitter

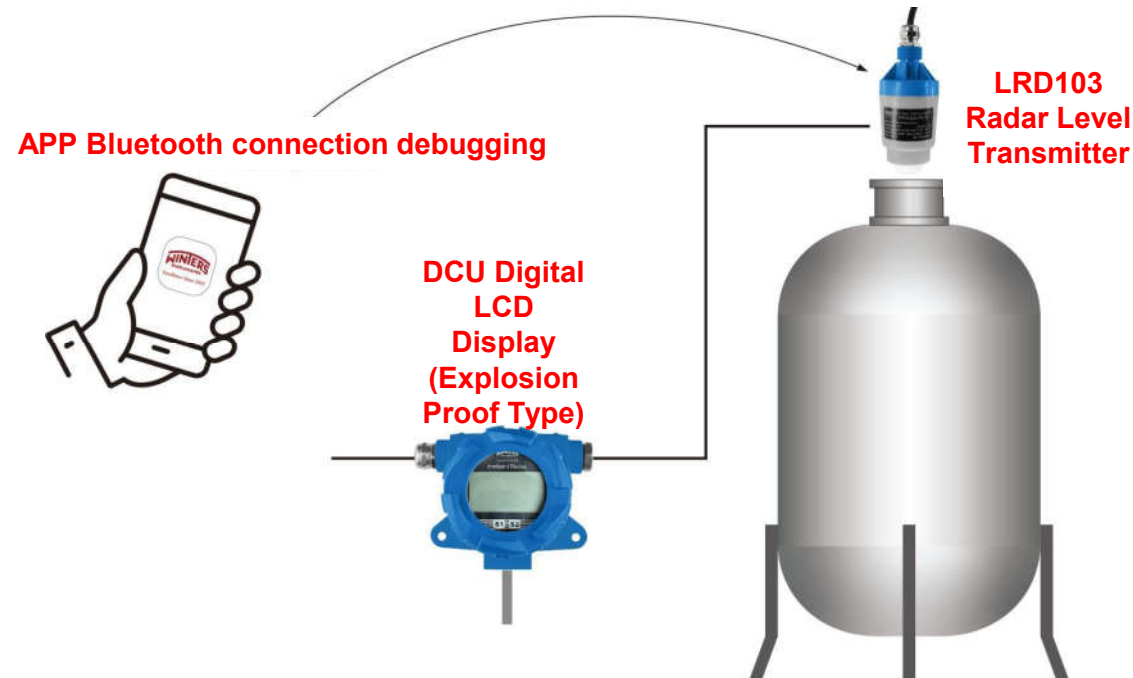


- Measuring range: 8m, 10m, 20m, 30m
- Measuring accuracy: Highest $\pm 1\text{mm}$
- Transmitting frequency: 120GHz
- Beam Angle: 1.5°
- Shell Material: ABS/ PVDF/ PTFE/ PEEK
- Overall dimensions: Diameter 78mm, length: 146mm
- Protection level: IP68
- Output signal: 4-20mA, HART
- Communication: RS485

Radar Level Transmitter

Product Feature

Built-in Bluetooth module, It can be remotely debugging and monitoring through by Mobile Phone APP. A split display meter can be optionally installed next to the tank to facilitate on-site workers to observe the values.



Liquid Level Monitoring

LY36 Series – Smart Type Differential Pressure Level Transmitter



- Using single crystal silicon core, high overvoltage, high precision
- Measuring range: 0.05mH₂O up to 20mH₂O
- Unilateral pressure resistance 16MPa, maximum static pressure 40MPa
- Come with LCD Display, can read the pressure value on site
- Accuracy: 0.2%
- Double explosion-proof certification, ExdIIC T6 and; ExiaIIC T6
- Protection level: IP67

Liquid Level Monitoring

8LS - Side Mounted Float Level Switch



- For high and low level alarms
- Output switch quantity, contact capacity is maximum 70VA
- Maximum medium pressure 0.5MPa
- Float density: 0.7-0.75 (Water is 1)
- Float material: PP and stainless steel
- The installation method is divided into internal installation and external installation, thread installation
- The wiring method is divided into direct outgoing and DIN 43650C

Coolant Distribution Unit (CDU)

CDU includes as following:

- 1. Compact Type Electromagnetic Flowmeter**
- 2. Humidity/ Temperature Transmitter**
- 3. Pressure Gauge**
- 4. Pressure Transmitter**
- 5. Temperature Transmitter**
- 6. Quik Coupling Connector**

LMF11C - Electromagnetic Flowmeter

- Body material comes standard with carbon steel spray paint, optional 304 stainless steel
- Standard Bluetooth module, which can be used for remote debugging via Bluetooth
- Process connections are available with threads, flanges or Wafer Type
- Pipe diameter sizes from DN10 to DN800
- Measurement accuracy 0.5%
- Built-in short circuit protection and reverse polarity protection
- Can measure forward and reverse flow



Temperature and Humidity Transmitter

ERH1 - Temperature and Humidity Transmitter

- The shell and probe rod are made of fireproof PP, protection grade UL94V-0
- Output 4-20mA and optional RS485 communication
- Humidity accuracy 3%RH, temperature accuracy 0.3°C
- LCD Display optional
- The ultra-low power consumption design of the internal circuit, greatly reduces the temperature drift caused by the heat dissipation of components during operation of the instrument, and improves the long-term stability of the product
- Circuit design using lightning protection and resistance to electrical fast transient (pulse group) interference
- Built-in short circuit protection and reverse polarity protection



Pressure Gauge

PFP – Fully Stainless Steel Pressure Gauge

- Process connection joint adopts a rotatable structure, and the direction of the Gauge head can be adjusted while ensuring sealing.
- Housing in polished 304 stainless steel
- Dial size can be selected 100mm
- Measurement accuracy is 1%FS
- Measuring range 0-1bar to 0-100bar
- The meter head can be oil-filled, shock-proof and condensation-proof
- Installation directions include radial and axial



Pressure Transmitter

LVB - Pressure Transmitter

- The pressure transmitter adopts slightly soluble glass core, high overpressure and high burst pressure.
- Built-in damping structure, high resistance to resist vibration, impact and water hammer effect
- 3 times full scale overpressure, 5 times full scale burst pressure
- Measurement accuracy 0.5%FS
- Compact structure, suitable for applications with limited installation space
- Pressure Sensor and base are integrated in one body, without any risk of leakage
- Measuring range 0-6bar to 0-2000bar
- Built-in short circuit protection and reverse polarity protection



Temperature Transmitter

TBS - Temperature Transmitter

- Built-in transmitter module, can directly output 4-20mA signal
- The shell and probe rod are made by 304SS material, which is corrosion-resistant.
- Compact structure, suitable for applications with limited installation space
- The size of the probe rod can be customized according to customer requirements, the minimum length is 5mm
- The special structure inside the transmitter can prevent condensation water
- Temperature range -50-200°C, the range can be set according to customer requirements
- Measurement accuracy 0.5%FS
- Built-in short circuit protection and reverse polarity protection



Coolant Distribution Unit (CDU)

Pressure Transmitter



Humidity & Temperature Transmitter



Pressure Gauge



Temperature Transmitter



Flowmeter



Quick Coupling Connector

OCP Standard

- The OCP standard refers to the standard for liquid-cooled push-in connectors developed by the Open Compute project (Open Compute project).
- It is an open source hardware organization jointly launched by Facebook in partnership with Intel, Goldman Sachs, Rackspace and Arista Networks in 2011.
- The core component of the Quick Coupling Connector OCP standard is the Universal Quick Connector UQD (Universal Quick Disconnect), which was initiated by Intel and developed into an open standard within the OCQ community.
- Therefore, UQD connectors of different brands can be matched and plugged into each other, just like the connectors of pressure gauges.

Quick Coupling Connector

UQD and UQDB

- Both are liquid-cooled universal quick coupling connectors. UQDB (Universal Quick Disconnect Blind) is the blind version of UQD.
- The tolerance of UQD is $\pm 5\text{mm}$, which is suitable for places that require high convenience of manual operation, such as the connection of ordinary data center racks and liquid cooling systems;
- The tolerance of UQDB is $\pm 1\text{mm}$, which is suitable for high-density systems and robot operation and maintenance scenarios, such as blade server back-insertion.



Quick Coupling Connector

UQD-Series

Manual joint

◆ **Standard diameter** (mm)

DN03~DN10

◆ **Material Quality**

Connector body: 316L Stainless Steel

Sealed : EPDM

◆ **pressure range**

Working pressure: 0 ~ 20 Bar

Burst pressure : ≥ 80 Bar

◆ **Temperature resistant**

$-40^{\circ}\text{C} \sim 120^{\circ}\text{C}$

◆ **Technical characteristics**

➤ [Meets OCP performance standards](#)

➤ 0~5Bar Hot swap under pressure

➤ Flat, drip-free design ensures leak-free connection and disconnection

➤ Push-in one-hand connection

➤ [Interchangeable with OCP standard products](#)

◆ **Suitable for application scenarios**

➤ Data center



Quick Coupling Connector

UQDB - Series

Blind Mate Connector - OCP Standard

◆ Standard diameter (mm)

DN03~DN10

◆ Material Quality

Connector body: 316L Stainless Steel

Sealed : EPDM

◆ Pressure Range

Working pressure: 0 ~ 20 Bar

Burst pressure : ≥ 80 Bar

◆ Temperature resistant

-40 °C ~120 °C

◆ Technical characteristics

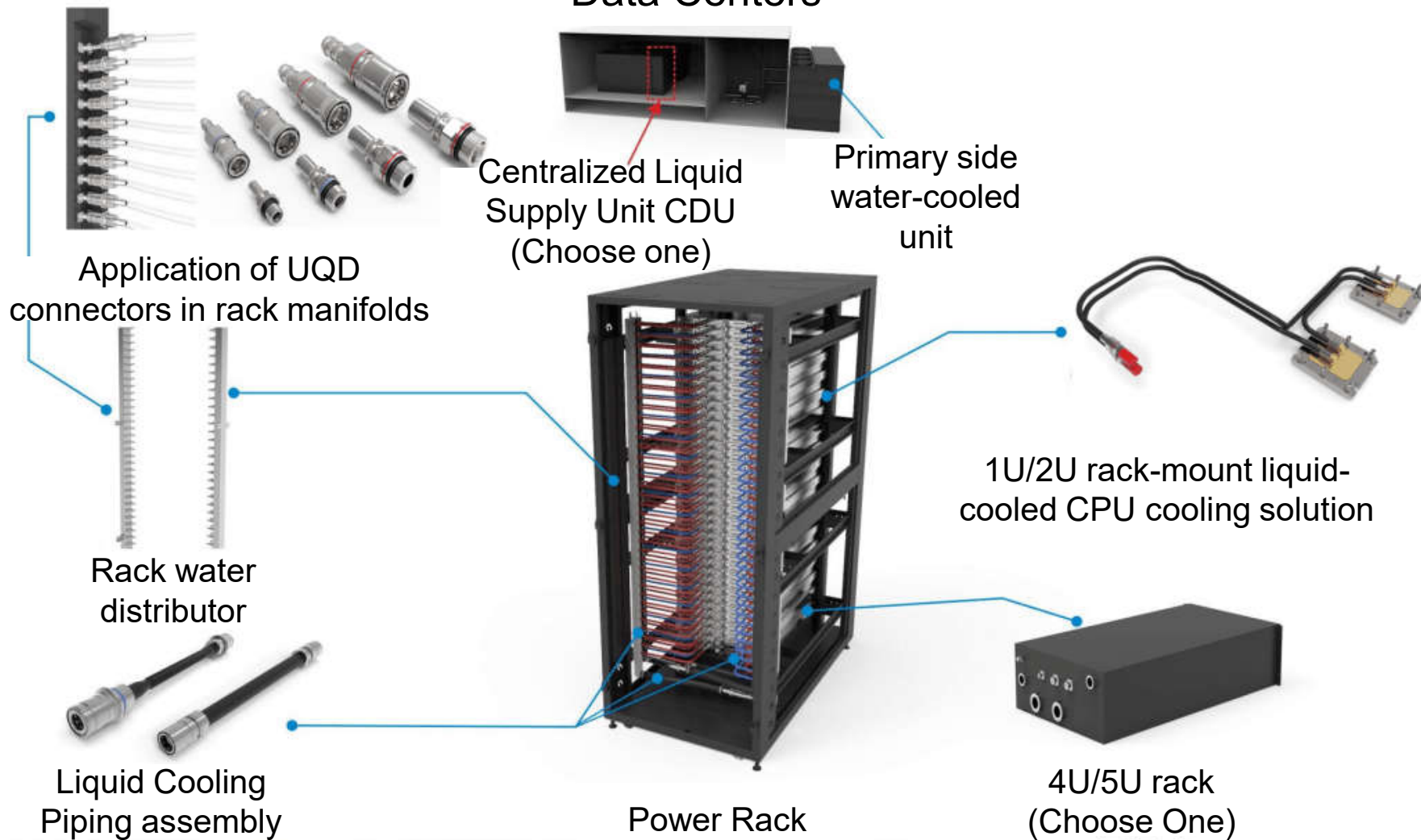
- [Meets OCP performance standards](#)
- 0~5Bar Hot swap under pressure
- Flat, drip-free design ensures leak-free connection and disconnection
- Blind mating tolerance $\pm 1\text{mm}$
- [Interchangeable with OCP standard products](#)

◆ Suitable for application scenarios

- Data center



Data Centers



Full Flow Interlock Ball Valve

SFC - series

Full flow interlock ball valve

◆ **Standard diameter** (mm)

DN20~DN40

◆ **Material quality**

Joint body: stainless steel casting

Seals : EPDM, HNBR, NBR, FKM

◆ **Pressure range**

Working pressure: 0-16bar

Burst pressure: ≥ 64 bar

◆ **Temperature resistant**

-40-120°C

◆ **Technical characteristics**

➤ [Full flow ball valve structure](#)

➤ High mutual matching consistency

➤ High sealing performance at low pressure

◆ **Suitable for application scenarios**

➤ Ring Manifold - CDU
Liquid cooling

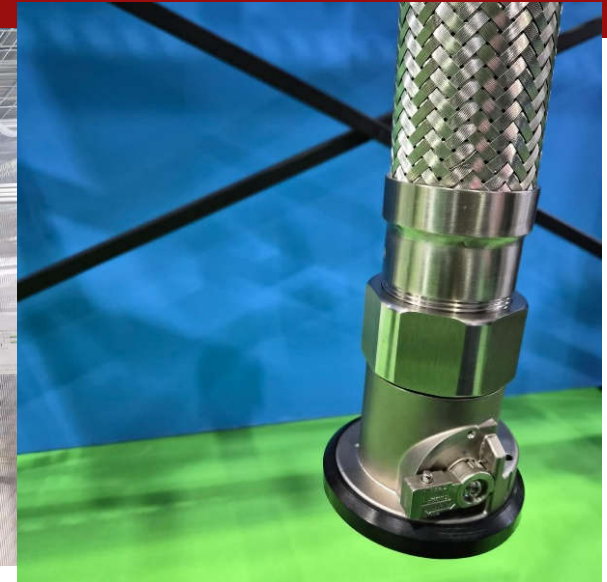
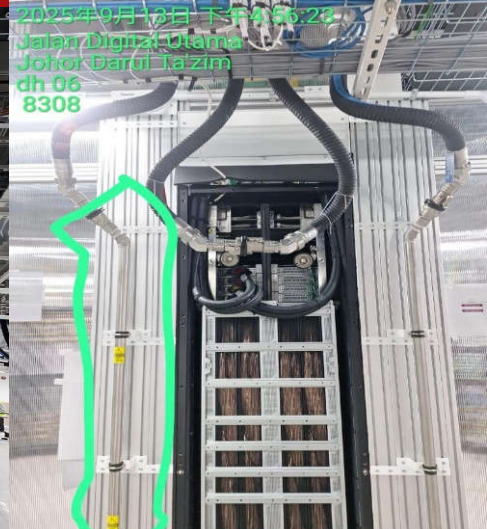
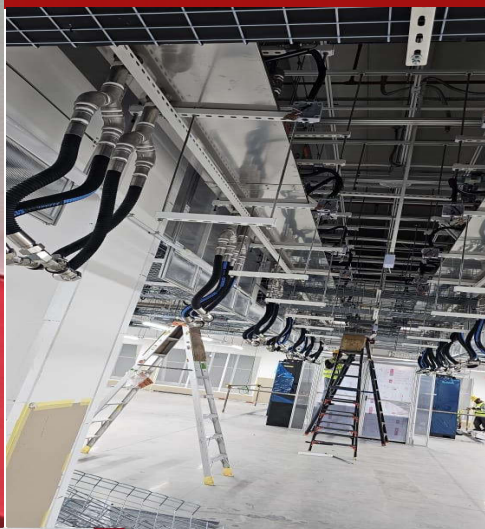
➤ Main line - Tank liquid cooling



Full Flow Interlock Ball Valve

Customer Focus items	WINTERS SFC	Other Competitors WQF8/FD	Remark
Body material	304 Stainless Steel Precision Casting	304 Stainless Steel Precision Casting	
Sealing material	EPDM	EPDM	The seal has passed 3M fluorinated liquid compatibility testing.
Maximum Working Pressure	16 Bar	10 Bar	
Minimum Burst Pressure	64 Bar	20 Bar	
Operating temperature range	-40°C~120°C	-10°C~120°C	
Flow rate (0.2 Bar pressure drop)	190 LPM	190 LPM	
Button/ Switch Operating Life	≥10000 times	N/A	
Connection Life	≥5000 times	N/A	
Inter-match Consistency	100% compatible and working smoothly	Some parts are incompatible or experience lag.	The design takes into account compatibility tolerances and 100% compatibility factory testing.
Low-pressure Sealing Performance (0.1~0.5 bar when disconnected))	No leakage	There is leakage	
Dual interlock function	When disconnected, pressing the button and then moving the handle will open the ball valve.	When disconnected, the ball valve cannot be opened by any operation.	
Customized	Customizable connection methods, sealing materials, and different pipe diameters are available.	N/A	
Price	Low	High	
Delivery	4 weeks	Unknown	

SFC Quick Coupling



On-site Product Photos



On-site Installation Magnetic flowmeter

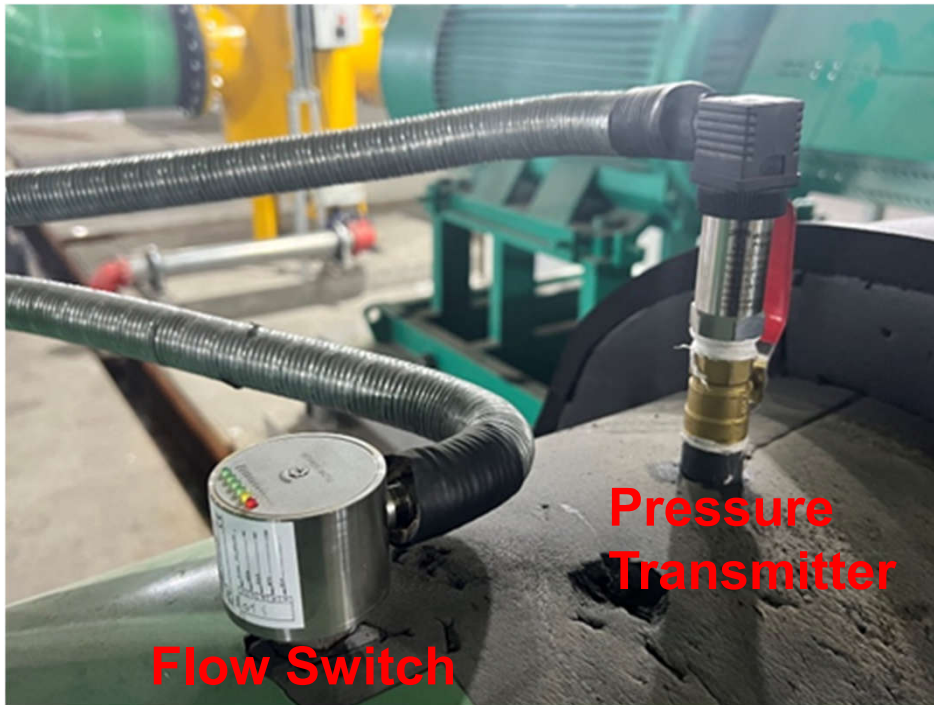


On-site installation photos for HVAC Products

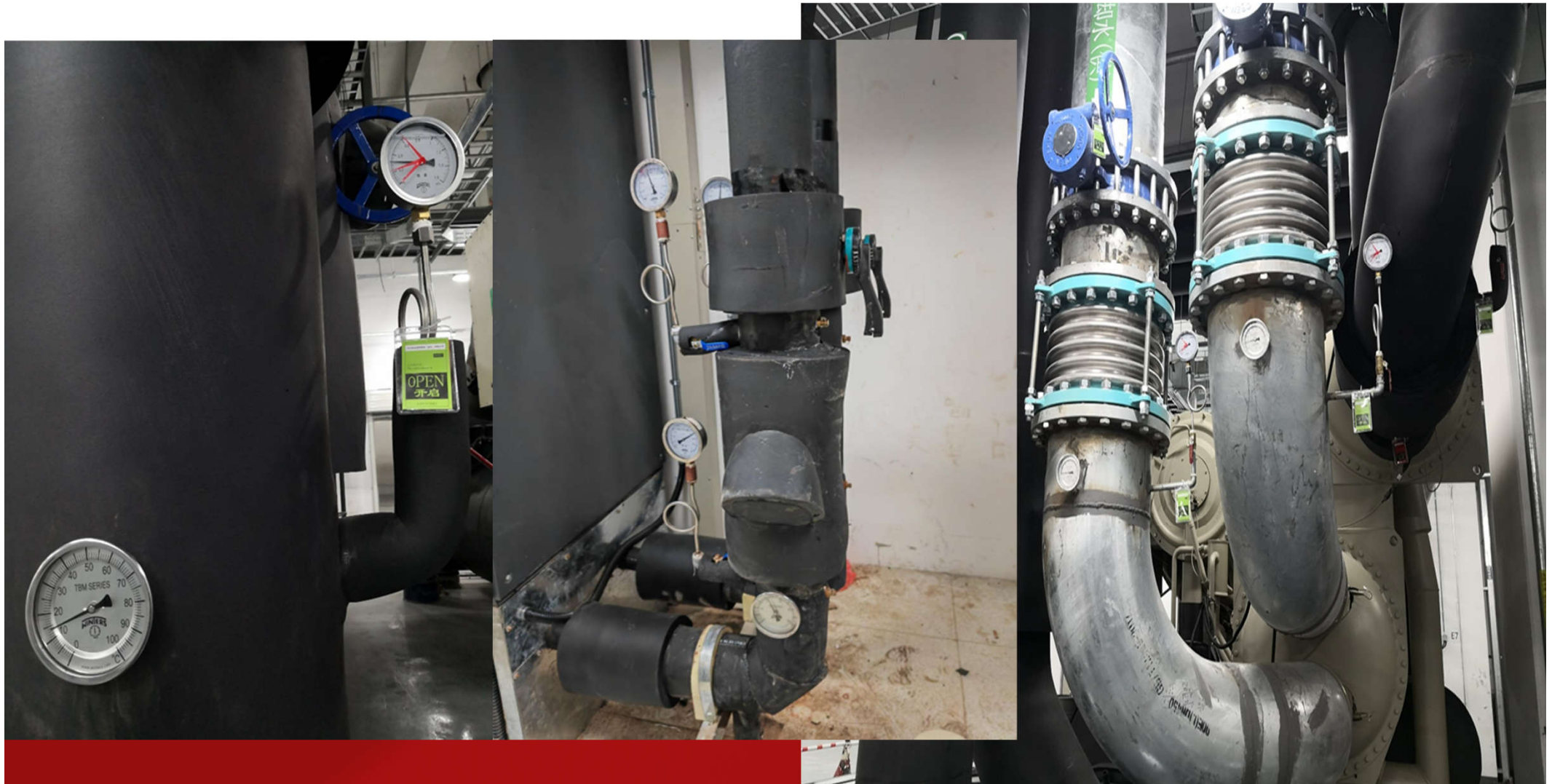


On-site Products installation for Data Centres

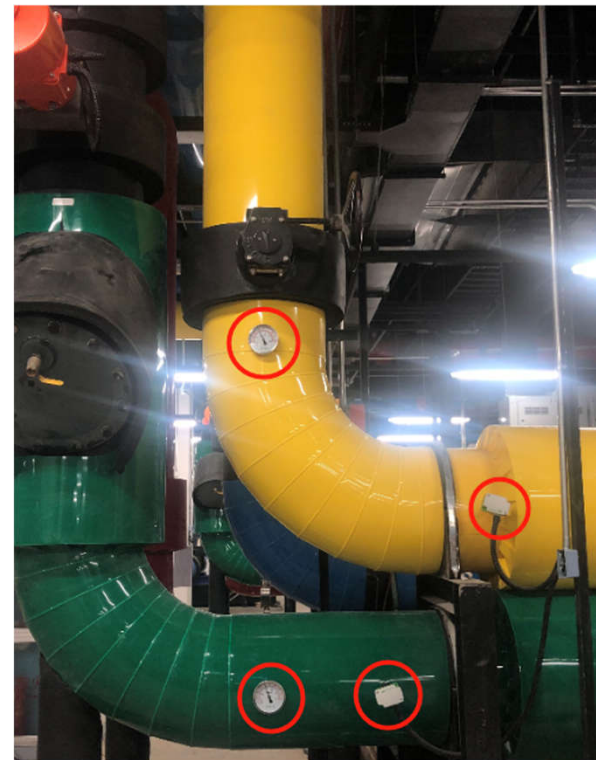
Eletromagnetic Flowmeter – Remote Type



On-site installation Pressure Gauge & Thermometer for Data Centres



On-site Installation Pressure Gauge & Thermometer for Data Centres



On-site Products installation for Data Centres



Remote Type Magnetic flowmeter/ Pressure Transmitter/ Pressure Gauge/
Thermometer

On-site Products installation for Data Centres



Magnetic flowmeter/ Pressure Gauge/
Thermometer

On-site Products installation for Data Centres



Magnetic Type Energy BTU flowmeter/ Differential Pressure Transmitter

On-site Products installation for Data Centres

Backup Power (Diesel Generators)



Magnetic Level Gauge/ Thermometer

Data Centres Project References List

- ANA GDS Data Changshu 3B project
- Apple Gui'an Data Center Project
- Guizhou Wangyee Cloud Data Center Project
- Century Langfang Sanhe Mingtai Data Center
- Volcano Cloud Taihang Computing Center Project
- Hangzhou Zhijiang Laboratory Intelligent Computing Center Project
- China Mobile Guangdong Data Center Project
- China Mobile (Lanzhou) Data Center Project
- Cangzhou Mobile Data Center Project
- China Mobile (Hangzhou) Information Technology Co., Ltd. Data Center Project

Data Centres Project References List

- GDS Malaysia Data Center Project. (2021)
- Bridge Data Center (BDC) Malaysia Project. (2023)
- Edgnex BKK01 Data Center (Damac), Thailand. (2025)
- Apple Ulanqab Data Center Project
- Hebei JD Data Center Project
- Century Taicang Big Data Center Industrial Park Project
- Volcano Engine Yangtze River Delta Computing Center Project
- Guangzhou Liangguang Data Center Project
- China Mobile Beijing-Tianjin-Hebei(Langfang)Data Center Phase II
- China Mobile Yangtze River Delta (Wuxi Mashan) Data Center
- Ningbo Unicom Intelligent Computing Data Center Project

Data Centres Project References List

- Hunan Mobile Zhuzhou Yunlong Data Center Phase II
- Ningbo Bank Data Center Expansion Project
- Soochow Securities Data Center Project
- Shanghai Yunsai Shuhai Technology Data Center
- CICC Data Center Phase II Project
- People's Bank of China Wuxi Clearing Center Project
- HNA Southern Data Center Project
- Guangzhou Ruihe Road Data Center Project (Yuntai Datacom)
- Jinyun Dongguan Digital Park 3 & 4 Building Project
- China Telecom Shanghai Waigaoqiao Free Trade Zone Data Center
- Eric New Energy Fengpu Data Center Project

Data Centres Project References List

- China Telecom Hangzhou Big Data Center Phase I/ Phase II/ Phase III Project
- Gui'an Midea Cloud Phase I Data Center
- Finance AK Cloud Base Phase I Data Center Project
- Agricultural Bank of China Beijing Data Center Computer Room Project
- Hangzhou Tonglu Jinmao Data Center Phase II
- Zhejiang Green Valley Cloud Data Center Project
- Nantong Comprehensive Bonded Zone Data Center District B ,Building D & E
- Zhongpeng Cloud Holdings Limited holds the Langfang Yunfeng Data Center
- China Telecom Shanghai Waigaoqiao Free Trade Zone Data Center
- Eric New Energy Fengpu Data Center Project

Data Centres Project References List

- Hunan Mobile Zhuzhou Yunlong Data Center Phase II
- Ningbo Bank Data Center Expansion Project
- Soochow Securities Data Center Project
- Shanghai Yunsai Shuhai Technology Data Center
- CICC Data Center Phase II Project
- People's Bank of China Wuxi Clearing Center Project
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- Eric New Energy Fengpu Data Center Project



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