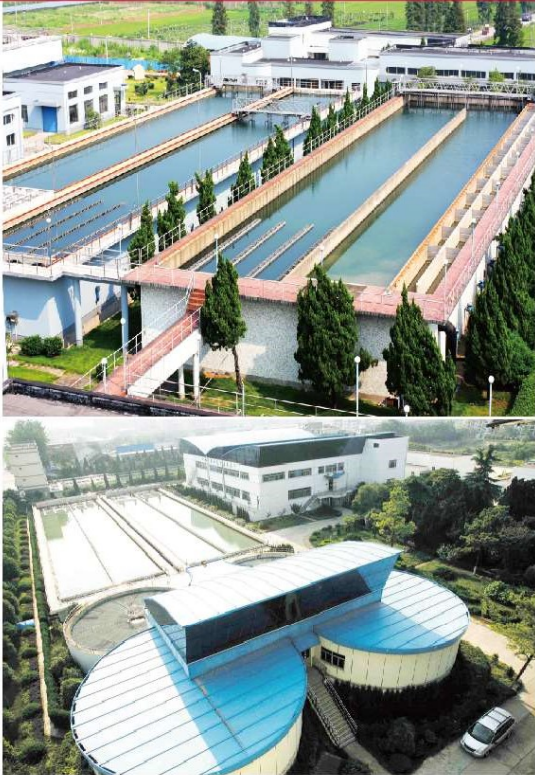


WATER ANALYZER METERS





Why Winters?

We're There.

Global. Operating from 7 worldwide offices in Toronto, Calgary, Buffalo, Houston, Shanghai, Montevideo and Buenos Aires, Winters works closely with a vast network of distribution partners in over 90 countries to ensure that customers receive the instrumentation they require. This also allows Winters to provide local support to ensure our customers are individually serviced in the markets they operate in.

Cover All Markets. We work with customers in industries such as fluid power, wastewater, pharmaceutical, petrochemical, oil and gas, process control, HVAC, power generation, plumbing, food and beverage, agriculture, pulp and paper, and many others. In addition, many of Winters' products are manufactured, tested and certified in accordance to globally recognized third party agency requirements (3A, CSA, CRN, CE, Ex, FM, UL, NACE, RoHS).

High Field Support. Winters maintains field located regional sales managers who provide on-site visits and product support to distributors, end users and OEMs. Our customer service team is well trained in order management and can also provide telephone support on technical challenges. In addition to our world class customer service, Winters conducts training programs every quarter to provide our distribution partners with comprehensive sales tools and keep them up-to-date on new developments in instrumentation.



3A

The objective of the 3A Sanitary Standards Committee is to formulate standards and accepted practices for equipment and systems used to process milk and milk products. Such standards are developed through all levels of sanitarians, equipment manufacturers and equipment users so those standards are acceptable to those involved in the sanitary aspects of dairy and related industries. The 3A Symbol Administrative Council authorizes manufacturers to display the 3A symbol on processing equipment that is in compliance with 3A Sanitary Standards.



CSA

The Canadian Standards Association (CSA) includes Canadian consumers, manufacturers, labour, government, and other regulatory agencies among its actively participating influences. The various groups work together to generate standard requirements (CSA standards) that demonstrate product quality, enhance market acceptability and improve quality and safety control procedures in manufacturing and construction for the Canadian marketplace. The standards generated by CSA are the cornerstones for determining a product's eligibility for certification in hazardous locations in Canada. CSA also performs product evaluation, testing and ongoing inspection to these standards and also to American and European standards through new inter-laboratory agreements.



CE

Having a CE marking is a declaration that Winters' product conforms to a specific Directive adopted by the EEA (European Economic Area), and is a requirement if the product is to be sold into any of the countries in this 18 member group. CE is an abbreviation for the "Conformite Europeene", meaning European Conformance. Unlike dangerous location approvals, CE markings are granted to products that conform to Directives which were developed using IEC and Cenelec standards. The Directives that affect transmitters are the EMC (Electromagnetic Compatibility) and LVD (Low Voltage) Directives. These state that the products must meet specific electromagnetic emission and immunity, as well as electrostatic discharge standards.



RoHS

The Restriction of Hazardous Substances Directive restricts the use of six hazardous materials in the manufacturing of electronic and electrical equipment. These materials are: lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls and polybrominated diphenyl ether. Bring "RoHS compliant" is commonly interpreted as bring "lead-free", or having under 0.1% of lead in the material.

WTS-300-PO-1 PH/ORP Transmitter

Application

- ♦ Water / waste-water treatment
- ♦ Drinking water
- ♦ Chemical industry
- ♦ Recycling and detergent
- ♦ Industrial process
- ♦ Fermentation process

Specifications

- ♦ 144*144mm microcomputer of pH / Redox potential controller
- ♦ Outdoor water & dust proof design suitable for wall, panel and pipes mounting.
- ♦ With Password and combination key emulation setup, correction mode design& security protection enhancement.
- ♦ Equipped with RS-485 interface (Modbus protocol) for direct communication to digital system (WTS-300-PO-1RS serial only)
- ♦ Two sets of programming outputs (WTS-300-PO-1RS serial only)
- ♦ Large LCD display with operation status and programmable symbol display.
- ♦ Automatic sensor clean function with programmable output
- ♦ Grounding function, which can eliminate the live interference of the sample
- ♦ Backlight sensor, automatic and manual backlight setting function
- ♦ Provides a set of electrode cleaning device contact, program setting output
- ♦ User-friendly operation.

Parameter

- ♦ AC power Supply 100V~240VAC±10%, 50/60HZ
- ♦ DC power Supply 20V~40VDC
- ♦ Temperature 0~50℃
- ♦ Dimensions 144mm×144mm×115mm(H×W×D)
- ♦ IP Protection IP65 (NEMA4)
- ♦ Installation wall mounting, pipes mounting, panel-mounted
- ♦ Hole size 138mm×138mm (H×W)
- ♦ Weight 0.8kg



Technical data

measuring range :	0-14PH/-1999~+1999mv/ -30℃~130℃
resolution :	0.01PH/1mv/0.1℃
accuracy :	±0.01PH±1digit/±0.1% ±1digit/±0.2℃±1digit, compensation for temperature error
input resistance :	>10 ¹² Ω
display :	Backlit large LCD display automatic or manually start LCD backlight control with light sensor
Cleaning :	Contact Output On 0-9999 S/Off 0-999.9 H
Solution grounding :	Elimination the solution electrification interference
output	Analog output signal: 4-20mA 1 or 2-wire, user defined corresponding load output 500Ω

PH/ORP Electrode

WTS mg1202

Glass compound electrode

Characteristic

- ♦ Annular ceramic hole
- ♦ Strong corrosion resistance

specifications

- ♦ Temperature : 0-60 °C
- ♦ Measuring : 0-14ph range



WTS mg1202RP

Glass compound electrode

Characteristic

- ♦ Annular ceramic hole
- ♦ Strong corrosion resistance

specifications

- ♦ Temperature : 0-60 °C
- ♦ Measuring : 1000mv range



WTS MPC 1202/WTS MPC 1312 /WTS MPS 1202

Two/three or four compound

PH electrode

Characteristic

- ♦ Pollution resistance of ring-shaped Teflon junction
- ♦ PC /PPS material, 3/4NPT
- ♦ Reference / temperature compensation / solution grounding etc

specifications

- ♦ Temperature : 0-80 °C



WTS MPC 1202ORP

Two/three or four compound

PH electrode

Characteristic

- ♦ Pollution resistance of ring-shaped Teflon junction
- ♦ PC /PPS material, 3/4NPT
- ♦ Reference/Temperature compensation/Solution grounding,etc



PH/ORP Electrode Accessories

WTSPT01

Pipe type plastic shell electrode sheath

specifications

- ♦ Material : PVC/PP
- ♦ Dimensions : 202mm*Φ34mm



WTSPT02

WTSPT01 Pipe type stainless shell electrode sheath

specifications

- ♦ Material : SUS316L
- ♦ Dimensions: 136mm
- ♦ Fluid interface: 3/4NPT pipe thread



WTSFC01

WTSFC01 circulation pool specification

specifications

- ♦ Dimensions : 130mm*Φ40mm
- ♦ Attached Quick connector (1/4 inch pipe)
- ♦ Material: organic glass
- ♦ Interface: PG13.5 (up) 3/4NPT(down)



Electrode self-cleaning device

- ♦ WTSCLN-01 for glass electrodes
- ♦ WTSCLN-02 for molded case electrodes
- ♦ Interface: 6.35mm



WTS-300-CN-1 Conductivity sensors

Application

- ♦ water / wastewater treatment
- ♦ Drinking water
- ♦ Chemical industry
- ♦ Recycling and detergent
- ♦ Industrial process
- ♦ Pure water, ultra-pure water

Specifications

- ♦ 144*144mm microcomputer of Conductivity controller.
- ♦ Outdoor water & dust proof design suitable for wall, panel and pipes mounting.
- ♦ Measurements including conductivity, specific resistance, salinity, TES
- ♦ Backlight sensor, automatic and manual backlight setting function
- ♦ Automatic sensor clean function with programmable output
- ♦ Large LCD display with operation status and programmable symbol display.
- ♦ Connection bipolar or quadrupole conductivity electrodes
- ♦ Automatic correction, manual and automatic temperature compensation function
- ♦ With Password and combination key emulation setup, correction mode design& security protection enhancement.
- ♦ Equipped with RS-485 interface (Modbus protocol) for direct communication to digital system (WTS-300-PO-1RS serial only)
- ♦ Two sets of programming outputs (WTS-300-CN-1serial only)
- ♦ TDS optional

Parameter

- ♦ AC power Supply 100V~240VAC±10%, 50/60HZ
- ♦ DC power Supply 20V~40VDC
- ♦ Temperature 0~50℃
- ♦ Dimensions 144mm×144mm×115mm(H×W×D)
- ♦ IP Protection IP65 (NEMA4)
- ♦ Installation wall mounting , pipes mounting , panel-mounted
- ♦ Hole size 138mm×138mm (H×W)



Technical data

measuring range / resolution / accuracy

Conductivity : 0.000-200.0ms/cm/0.001us/cm/
±1%±1digit

Resistivity : 0.000-20.00MΩ.cm/0.01MΩ.cm/
±1%±1digit

salinity : 0.0ppt-70.0ppt/0.1ppt/±1%±1digit

Temperature: -30.0℃~130.0℃/0.1℃/±0.2%±1digit,
auto temperature compensation

TDS : 0~19999ppm/0.001ppm/±1%±1digit

Electrode constant : 0.01,0.1,1,10.00 1/cm,
0.0050~19.991cm

temperature compensation : Auto temperature compensation:
PT1000/NTC30K,
manual temperature compensationkey
-in setting

temperature coefficient : Linear temperature compensation of
conductance (0.00%~20.00%) or
nonlinear temperature compensation:
nonlinear compensation of specific
resistance

Cleaning : Contact output, ON 0-9999 S /OFF 0-999.9H

relay output : relay output two groups of ON/OFF signal
output

Conductivity Electrodes and accessories

WTSMCS1407

WTSMCS1407 four-pole conductance electrodes

characteristics

- ♦ four-pole electrodes, The electrodes is not easily polarized and the data is stable in a higher concentration solution. good reproducibility
- ♦ easy to maintain, four electrodes on a plane easy to clean

specifications

- ♦ Constant: 0.7
- ♦ measuring range: 0-200ms/cm
- ♦ Pressure range: 0.7MPa
- ♦ installation dimensions: 3/4NPT
- ♦ length of electrode body: 153mm
- ♦ length of electrode with protection tube: 166mm



WTSFC01

WTSFC01 molded case electrode is used for flow cell

characteristics

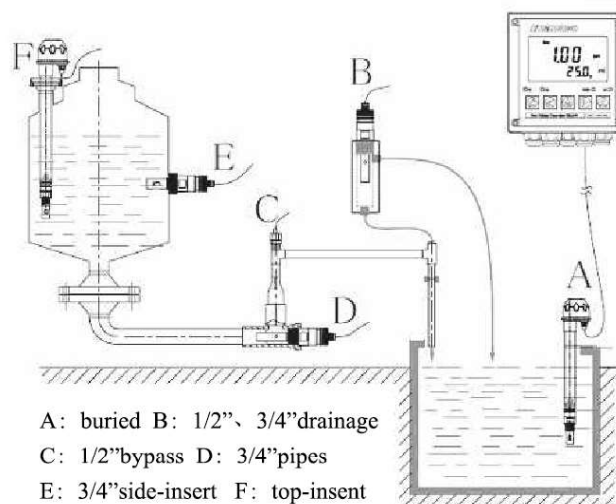
- ♦ easy installation and maintenance of electrodes
- ♦ Easy to observe the flow of water samples

Specifications

- ♦ Dimensions: 130mm*Φ40mm
- ♦ Attached Quick connector (1/4 inch pipe)
- ♦ Material: organic glass



On-line conductance /resistivity measurement conductivity diagram



WTS-200-CN-2 Inductive conductivity / concentration sensors

Application

Widely used in the food and pharmaceutical process of CIP concentration, water treatment industry resin regeneration acid and alkali concentrations, electronic semiconductors and chemical field of various types of acid-base salt concentration on-online monitoring.

Specifications

- ♦ 96*96 Micro-computer intelligent design conductivity / concentration transmitter
- ♦ Outdoor water & dust proof design suitable for wall, panel and pipes mounting.
- ♦ Large image LCD display with inductive backlight setting function
- ♦ Easy to operate cleaning with Graphic display symbol cleaning process guide
- ♦ inductive electrode signal input which can display material concentration, conductivity and temperature at the same time.
- ♦ Preset the conductivity / concentration curve of acid-alkali salts such as H₂SO₄, HNO₃, HCl, NaOH, NaCl.
- ♦ Customize of conductivity / concentration curve of unknown matter
- ♦ Manual / automatic correction, temperature compensation function and final correction information
- ♦ With Password and combination key emulation setup, correction mode design& security protection enhancement.
- ♦ Automatic sensor clean function with programmable output
- ♦ With two output 0/4~20ma and RS-485 as optional

Parameter

- ♦ AC power Supply 100V~240VAC±10%, 50/60HZ
- ♦ DC power Supply 20V~40VDC
- ♦ Temperature 0~50℃
- ♦ Dimensions 96mm×96mm×148mm(H×W×D)
- ♦ IP Protection IP65 (NEMA4)
- ♦ Installation wall mounting , pipes mounting , panel-mounted
- ♦ Hole size 91mm×91mm (H×W)



Technical data

measuring range / resolution / accuracy

Conductivity : 0.0-2000.0ms/cm/0.01ms/cm/±1%±1digit

Concentration : 0.00-100.0% (different chemical) / 0.1%/1%±1digit

Temperature : -30.0℃~130.0℃/0.1℃/±0.2%±1digit, auto temperature compensation

Temperature Compensation: 25℃ linear: Auto temperature compensation: PT1000/NTC30K, manual temperature compensation key-in setting

temperature coefficient : Linear temperature compensation of conductance (0.00%~20.00%) nonlinear temperature compensation

Cleaning : Contact outputs, ON 0-99min59 S /OFF 0-999H59min

output : relay output two groups of ON/OFF signal output program settings 240VAC/0.5A

Analog output : 4-20mA 1 or 2 -wire , user defined

Inductive conductivity electrode and accessories

WTSMCS1207

WTSMCS1207 Inductive conductivity electrode

characteristics

- ♦ Designed for use in industrial waste-water containing strong acid, corrosive and salinity.

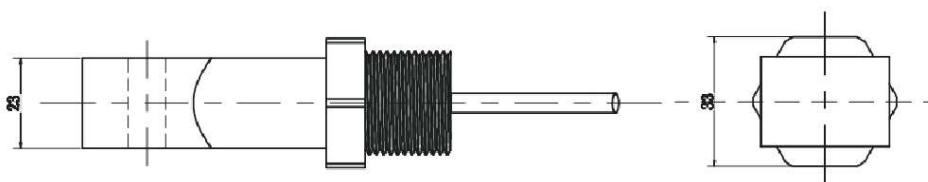
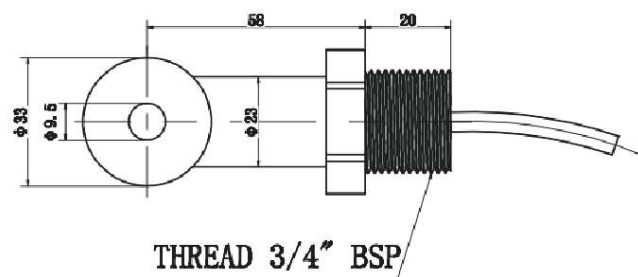
Specification

- ♦ Measuring range : 0 ~ 2000 ms/cm
- ♦ Operating temperature : 0 ~ 50 °C
- ♦ Cable length : 5m
- ♦ Material : PP (0 ~ 110 °C)
PTFE (0 ~ 135 °C)

Mounting

- 1 : Thread mounting
- 2 : Flow cell mounting

Dimensions



WTS-300-LDO-1 Fluorescence of dissolved oxygen sensors

Application

- ♦ water / wastewater treatment
- ♦ Drinking water
- ♦ Chemical industry
- ♦ Recycling and detergent
- ♦ Fish farming

Specifications

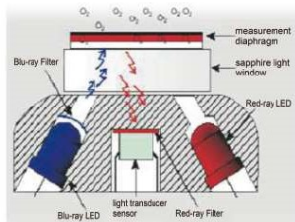
- ♦ WTS-300-LDO-1 dissolved oxygen controller with optical dissolved oxygen sensor
- ♦ Outdoor water & dust proof design suitable for wall, panel and pipes mounting.
- ♦ Automatic sensor clean function with programmable output
- ♦ Large LCD display with operation status and programmable symbol display.
- ♦ Backlight sensor, automatic and manual backlight setting function
- ♦ Automatic correction, manual and automatic temperature compensation function
- ♦ With Password and combination key emulation setup, correction mode design& security protection enhancement.
- ♦ RS-485 standard Modbus communication protocol for direct communication to digital systems
(WTS-300-LDO-1RS serial only)
- ♦ Two sets of programming outputs (WTS-300-LDO-1RS serial only)

Parameter

- ♦ AC power Supply 100V~240VAC±10%, 50/60HZ
- ♦ DC power Supply 20V~40VDC
- ♦ Temperature 0~50℃
- ♦ Dimensions 144mm×144mm×115mm(H×W×D)
- ♦ IP Protection IP65 (NEMA4)
- ♦ Installation wall ,panel,pipes mounting
- ♦ Hole size 138mm×138mm (H×W)

Measuring principle

The sensor optics send blue light pulses to the fluorescence layer. The markers "answer"(fluoresce) with red light pulses. The duration and intensity of the response signals is directly dependent on the oxygen contents and the partial Pressure. If the medium is free from oxygen, the response signals are long and very intense .Oxygen molecules quench the marker molecules. As a result, the response signals are shorter and less intense. The sensor returns a signal that is in proportion to the oxygen concentration in the medium. In addition to the standard values of concentration,saturation index and partial pressure , the sensor also returns a raw measured value in us.



Technical data

measuring range :	0-200%: 0.00~19.99mg/l:0.00~19.99ppm: -30~130℃ depending on the electrode
resolution :	0.01%: 0.01mg/l:0.01ppm:0.1℃
Accuracy :	±3%of reading ±1digit: ±0.2℃±1digit, temperature error correction function
pressure compensation:	0.500~2.500bar or 7.25~36.25psi manual adjustment
Temperature compensation :	auto temperature compensation
Salinity compensation :	0.0~45.0 ppt
output :	relay output two groups of ON/OFF signal output program settings 240VAC/0.5A

WTS-300-DO-1 Dissolved oxygen sensors

Application

- ♦ water / waste-water treatment
- ♦ Chemical industry
- ♦ Fish farming
- ♦ Drinking water and surface water indicators monitoring
- ♦ Recycling and detergent
- ♦ Fermentation process

Specifications

- ♦ 144*144 mm Micro-computer of dissolved oxygen sensor
- ♦ Outdoor water & dust proof design suitable for wall, panel and pipes mounting.
- ♦ Provides a set of electrode cleaning device contact and program setting output
- ♦ Large LCD display with operation status and programmable symbol display.
- ♦ Backlight sensor, automatic and manual backlight setting function
- ♦ Automatic correction, manual and automatic temperature compensation function
- ♦ With Password and combination key emulation setup, correction mode design& security protection enhancement.
- ♦ RS-485 standard Modbus communication protocol for direct communication to digital systems (WTS-300-DO-IRS serial only)
- ♦ Two sets of programming outputs (WTS-300-DO-1 serial only)

Parameter

- ♦ AC power Supply 100V~240VAC±10%, 50/60HZ
- ♦ DC power Supply 20V~40VDC
- ♦ Temperature 0~50℃
- ♦ Dimensions 144mm×144mm×115mm(H×W×D)
- ♦ IP Protection IP65 (NEMA4)
- ♦ Installation wall ,panel,pipes mounting
- ♦ Hole size 138mm×138mm (H×W)



Technical data

measuring range :	0-200%: 0.00~19.99mg/l:0.00~19.99ppm:-30~130℃ depending on the electrode
resolution :	0.01%: 0.01mg/l, 0.01ppm, 0.1℃
accuracy :	±0.5%of reading ±1digit: ±0.2℃ ±1digit, temperature error correction function
input resistance :	>10 ¹² Ω
pressure compensation :	0.500~2.500bar or 7.25~36.25psi manual adjustment
Temperature Compensation :	Auto temperature compensation: PT1000/NTC30K, manual temperature compensation key-in setting
Salinity compensation :	0.0~45.0 ppt
Cleaning :	Contact outputs, ON 0-9999 S /OFF 0-999.9H
relay output :	two groups of ON/OFF signal output

Dissolved oxygen electrode and accessories

WTSM1912

WTSM1912 double membrane dissolved oxygen electrode

characteristic

- ♦ disposable dissolved oxygen electrodes don't need to maintain and easy to use
- ♦ Polysiloxane two layer Teflon to strengthen the oxygen permeable membrane, strong and durable, fast response, small impact water flow

specifications

- ♦ measuring range : 0-20.00ppm
- ♦ Response time : 98% < 60S (25℃)
- ♦ residual current < 0.5% current in air.
- ♦ Temperature sensor : NTC22K
- ♦ Polarization voltage : -670 + 50mV
- ♦ signal current in air : 40-80ma(25℃)
- ♦ length : 152mm
- ♦ temperature : 0-50℃
- ♦ Pressure range : 0-0.4MPa



WTSM 1900

WTSM 1900 Optical dissolved oxygen sensor

characteristic

- ♦ Principle of Fluorescence, no need to replace diaphragm and electrolyte
- ♦ No flow need measurement possible in still water
- ♦ intelligent self-monitoring guarantee reliable measured values
- ♦ No oxygen consumption, and no flow rate and agitation requirements, high measurement accuracy

specifications

- ♦ measuring range : 0-20mg/l (0-20ppm) 0-200% SAT
- ♦ Repeatability : + 0.5% FS
- ♦ Temperature : 0-50℃
- ♦ Dimensions : Φ50.6*260mm
- ♦ Weight : 1.36kg
- ♦ T90 : 60S
- ♦ Materials : membrane body SUS316L (black titanium plating) fluorescent layer cap; POM
- ♦ process connection : G1
- ♦ cable length : 10m, max 80m (including cable extension)



WTSC1N03 MD1900

WTSC1N03 MD1900

Electrode cleaning device

Characteristic

- ♦ easy to install and maintain

specifications

- ♦ Installation: screw fixing
- ♦ dimensions: 157*Φ63mm



WTSP-100A

WTSP-100A protection tube

Characteristic

- ♦ lower requirement to electrode line and only wire to the junction box then wire the other

specifications

- ♦ Length: 1m/1.5m/2m
- ♦ with round junction box and electrode sheath



WTS-300-TB-2 WTS-300-TB-2 Turbidity sensor

Application

- ♦ water / waste-water treatment
- ♦ Drinking water
- ♦ Chemical industry
- ♦ Recycle water

Specifications

- ♦ 144*144mm Micro-computer of turbidity sensor
- ♦ Outdoor water & dust proof design suitable for wall, panel and pipes mounting.
- ♦ Provides a set of electrode cleaning device contact and program setting output
- ♦ Large LCD display with operation status and programmable symbol display.
- ♦ Backlight sensor, automatic and manual backlight setting function
- ♦ 5- point automatic correction, single point correction can be adjusted according to laboratory or field analysis.
- ♦ With Password and combination key emulation setup, correction mode design & security protection enhancement.
- ♦ RS-485 standard Modbus communication protocol for direct communication to digital systems
(MB-300-TB-2RS serial only)
- ♦ Design by 90 degree angle optics monitoring principle , conforms to U.S.EPA and ISO7027 standard
- ♦ Two sets of programming outputs (MB-300-TB-2 serial only)

Parameter

- ♦ AC power Supply 100V~240VAC±10%, 50/60HZ
- ♦ DC power Supply 20V~40VDC
- ♦ Temperature 0~50℃
- ♦ Dimensions 144mm×144mm×115mm(H×W×D)
- ♦ IP Protection IP65 (NEMA4)
- ♦ Installation wall ,panel,pipes mounting



Technical data

Measuring pattern :	Turbidity
Measuring Unit :	NTU , FTU ,FNU
Measuring range :	Depending on the tape of sample
Resolution :	AUTO(0.01,0.1,1)
Output	
Relay output :	two groups of ON/OFF signal output
Program settings :	240VAC/0.5A
Analog output :	4-20mA 1 or 2-wire ,User defined

WTS-300-TB-3 suspended solids / Sludge concentration (MLSS) sensor

Application

- ♦ water / waste-water treatment
- ♦ Drinking water and surface indicators monitoring
- ♦ Chemical industry
- ♦ Recycling and detergent

Specifications

- ♦ 144×144mm Micro-computer of suspended solids /sludge concentration sensor
- ♦ Outdoor water & dust proof design suitable for wall, panel and pipes mounting.
- ♦ Provides a set of electrode cleaning device contact and program setting output
- ♦ Large LCD display with operation status and programmable symbol display.
- ♦ Backlight sensor, automatic and manual backlight setting function
- ♦ Single point correction can be adjusted according to field analysis.
- ♦ With Password and combination key emulation setup, correction mode design& security protection enhancement.
- ♦ RS-485 standard Modbus communication protocol for direct communication to digital systems (WTS-300-TB-3RS serial only)
- ♦ Two sets of programming outputs (WTS-300-TB-3 serial only)

Parameter

- ♦ AC power Supply 100V~240VAC±10%, 50/60HZ
- ♦ DC power Supply 20V~40VDC
- ♦ Temperature 0~50℃
- ♦ Dimensions 144mm×144mm×115mm(H×W×D)
- ♦ IP Protection IP65 (NEMA4)
- ♦ Installation wall ,panel,pipes mounting



Measuring principle

In the measurement sensor of WTS-300-TB-3 turbidity / sludge concentration sensor department, located at 45 degrees angle has a built-in LED light source.

The light source emits 880nm near-infrared light to the sample, The 90 scattered

Light method with a wavelength in the near-infrared range (880nm) according to

ISO 7027/EN27027 records turbidity values under standardized, comparable conditions.

The back-scattering light at the angle of 140 degrees angle is determined by the rear detector and then the instrument calculates the value of detected strong signal degree before and after, thus giving the sludge concentration value.

Because of the LED emits 880nm of near-infrared light, if the sample has color that will not affect the measurement results.

Technical data

Measuring pattern

Suspended solids : ppm,mg/l

Sludge concentration : g/l

Measuring range : Depending on the sensor
MSS 2000; MLSS 120

Resolution : AUTO(0.01,0.1,1)

Output

Relay output : two groups of ON/OFF signal output

program settings : 240VAC/0.5A

WTS-300-TB-4

Application

- ♦ Water / waste-water treatment
- ♦ Drinking water and surface water indicators monitoring
- ♦ Pure water
- ♦ Water Reuse

Specifications

- ♦ 144*144mm Micro-computer of low turbidity sensor
- ♦ Outdoor water & dust proof design suitable for wall, panel and pipes mounting.
- ♦ Provides a set of electrode cleaning device contact and program setting output
- ♦ Large LCD display with operation status and programmable symbol display.
- ♦ Backlight sensor, automatic and manual backlight setting function
- ♦ 5- point automatic correction, single point correction can be adjusted according to laboratory or field analysis.
- ♦ With Password and combination key emulation setup, correction mode design& security protection enhancement.
- ♦ RS-485 standard Modbus communication protocol for direct communication to digital systems
(WTS-300-TB-4RS serial only)
- ♦ Two sets of programming outputs (WTS-300-TB-4 serial only)
- ♦ Design by 90 degree angle optics monitoring principle , conforms to U.S.EPA and ISO7027 standard

Parameter

- ♦ AC power Supply 100V~240VAC±10%, 50/60HZ
- ♦ DC power Supply 20V~40VDC
- ♦ Temperature 0~50℃
- ♦ Dimensions 144mm×144mm×115mm(H×W×D)
- ♦ IP Protection IP65 (NEMA4)
- ♦ Installation wall ,panel,pipes mounting
- ♦ Hole size 138mm×138mm (H×W)



Technical data

Measuring Unit :	NTU , FTU ,FNU
Measuring range :	0-20.000/0-200.00
Resolution :	AUTO(0.001/0.01/0.1/1)
Cleaning :	Contact Output, ON 0~9999 S /OFF 0~999.9h
Output	
Relay output :	two groups of ON/OFF signal output
program settings :	240VAC/0.5A
Analog output :	4-20mA 1 or 2-wire ,User defined

Turbidity sensor and accessories

WTSMTU100/500/5000

WTSMTU100/500/5000 turbidity (MTU) sensor (TURB-1200)

characteristic

- ♦ The sensor adopts two-beam infrared scattering spectrophotometer to detect so it has good repeatability and stability
- ♦ Optional cleaning brush automatic cleaning, greatly reduce the maintenance of the sensor

specifications

- ♦ measuring range: 5~100/500/5000NTU
- ♦ Dimensions: $\Phi 60\text{mm} \times 260\text{mm}$
- ♦ Cleaning interval:
1min/5min/15min/30min/1hr/4hr/12hr/1day/
3day/7day/
- ♦ Accuracy: less than $\pm 3\%$ of measured value
- ♦ repeatability: $\pm 2\%$ of full range
- ♦ process Connection: G1
- ♦ Weight: 1.58Kg
- ♦ Material: SUS316L, Coating Ti, Viton rubber, PVC(titanize)



WTSMLSS-120

WTSMLSS-120 sludge concentration (MLSS) sensor (TURB-1300) MSS-2000 suspended solids (SS) sensor

Characteristic

- ♦ The sensor adopts two-beam infrared scattering spectrophotometer to detect so it has good repeatability and stability
- ♦ Optional cleaning brush automatic cleaning, greatly reduce the maintenance of the sensor

specifications

- ♦ measuring range: 0~120g/l
(MLSS-120) 0~20,000PPM(MSS-2000)
- ♦ Dimensions: $\Phi 60\text{mm} \times 260\text{mm}$
- ♦ Cleaning interval:
1min/5min/15min/30min/1hr/4hr/12hr/1day/3
day/7day/
- ♦ Accuracy: less than $\pm 3\%$ of measured value
- ♦ repeatability: $\pm 2\%$ of full range
- ♦ process Connection: G1
- ♦ Weight: 1.58Kg
- ♦ Material: SUS316L, Coating Ti, Viton rubber, PVC(titanize)



WTSMTU-100S

WTSMTU-100S low turbidity sensor (TURB-1210)

specifications

- ♦ measuring range: 0.01~100NTU
- ♦ Dimensions: 310mm*210mm*410mm(L*W*H)Material: ABS
- ♦ repeatability: $\pm 2\%$ of full range
- ♦ Accuracy: 0.001~40NTU $\pm 2\%$ of measured value or $\pm 0.015\text{NTU}$
min/max value 40~100NTU $\pm 5\%$ of measured value
- ♦ cable length: 3m, not recommended for extension
- ♦ Operating temperature: 0~45 C
- ♦ Water flow : $300\text{ml/min} \leq X \leq 700\text{ml/min}$
- ♦ Response time: instant response (initial 2 minutes)
- ♦ Pipe fittings: Injection port: 1/4NPT; discharge outlet: 1/2NPT
- ♦ IP protection: IP66/NEMA4



WTS-300-CL-1 Free chlorine / chlorine dioxide sensor

Application

Widely used in water, drinking water quality monitoring and follow Automatic control of water-loop, disinfection of swimming pool, RO water dechlorination system and other fields.

Specifications

- ♦ 144*144mm Micro-computer of Free chlorine / chlorine dioxide sensor
- ♦ Outdoor water & dust proof design suitable for wall, panel and pipes mounting.
- ♦ Capable in simultaneously connect ph electrode to collect ph value and make the ph curve compensation.
- ♦ Manual and automatic temperature compensation
- ♦ RS-485 standard Modbus communication protocol for direct communication to digital systems (WTS-300-CL-1RS serial only)
- ♦ Two sets of programming outputs (WTS-300-CL-1serial only)
- ♦ Automatic protection of water-break

Parameter

- ♦ AC power Supply 100V~240VAC±10%, 50/60HZ
- ♦ DC power Supply 20V~40VDC
- ♦ Temperature 0~50℃
- ♦ Dimensions 144mm×144mm×115mm(H×W×D)
- ♦ IP Protection IP65 (NEMA4)
- ♦ Installation wall ,panel,pipes mounting



Technical data

Measuring pattern :	Cl ₂ /pH/Temp
Measuring range :	0.00~14.00pH 0~10.00ppm(mg/l) -30~130℃
Resolution :	0.01ppm(mg/l) /0.01pH/0.1℃
Accuracy :	±0.5%±1Digit/±0.01pH±1Digit/ ±0.2℃±1Digit
Storage Temperature :	-20~70℃
Digital filtering :	0~60 seconds Adjustable / Factory set value 30s
Temperature compensation :	Auto temperature compensation : PT1000/NTC30K, Manual temperature compensatio; Key-in setting
Calibration Mode :	Two point, offset value correction
Output Relay output :	Two groups of ON/OFF signal output

WTS-300-CL-1 free chlorine electrodes and accessories

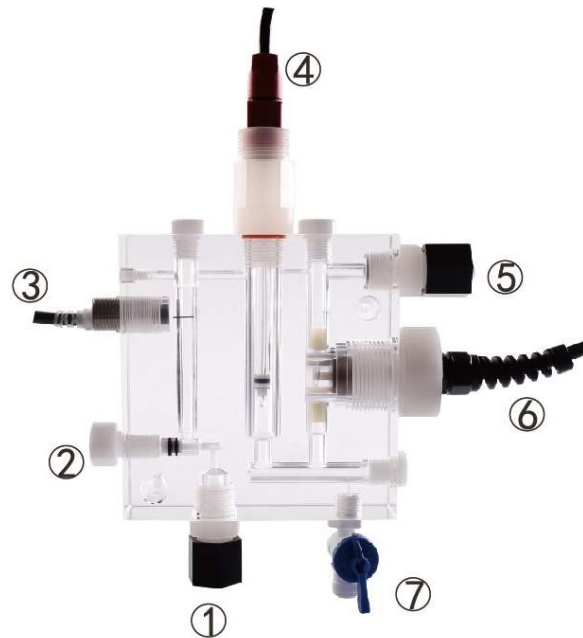
WTSMCL01

WTSMCL01 free chlorine electrodes and accessories

- ♦ The design of the current- type free chlorine transducer for measuring inorganic chlorine
- ♦ this flow tank measuring device can be designed with ph electrode, residual chlorine electrode, flowmeter and velocity sensor, which can reduce the installation disk surface
- ♦ Made of high quality plexiglass
- ♦ process pressure: 0.6MPa
- ♦ weight: 0.88kg
- ♦ Dimensions: 135*130*50mm

comment

- ♦ water Inlet
- ♦ Flow control valve
- ♦ Flow detector (optional)
- ♦ PH compensated electrode for measuring PH (optional)
- ♦ water outlet
- ♦ free chlorine electrodes
- ♦ sample connection



WTS-500-MP Multi-parameter transmitter

Application

Multi-parameter transmitter widely used in waste water treatment, purified water, loop water, boiler water, etc. Systems and electronic, electroplating, printing and dyeing, chemical, food, pharmaceutical and other processes field. in the large- scale sewage treatment plant, industrial process monitoring, and other applications it performance Excellence.

Specifications

- ♦ 310*190mm Micro-computer of Multi-parameter transmitter
- ♦ Outdoor water & dust proof design suitable for wall mounting.
- ♦ Electrode signal can be extended , not affected by distance
- ♦ Extensible wireless transmission, or Ethernet
- ♦ When measuring at the same time with USB storage parameters, you can view or download past records at any time or view the historical curve
- ♦ Large touch display panel , showing six of identical or different parameters
- ♦ 6 Group RELAY, 6 sets of current, and a set of TCP/IP Ethernet interface
- ♦ Optional RS-485 standard Modbus communication protocol (WTS-500-MPRS serial only)

Parameter

- ♦ AC power Supply 100V~240VAC±10%, 50/60HZ
- ♦ Temperature 0~50℃
- ♦ Dimensions 310mm×190mm×120mm(H×W×D)
- ♦ IP Protection IP65 (NEMA4)
- ♦ Installation wall mounting



Technical data

Measuring range :	Depending on the electrode
Resolution :	Depending on the electrode
Accuracy :	Depending on the electrode
Repeatability :	Depending on the electrode
Digital filtering :	0~60 seconds Adjustable / Factory set value 30s
Temperature compensation :	Auto temperature compensation : PT1000/NTC30K, Manual temperature compensatio; Key-in setting
Calibration Mode :	Two point or three-point correction, offset value correction
Output	
Relay output :	Six groups of ON/OFF signal output
program settings :	240VAC/0.5A
Analog output :	4-20mA 1 or 2-wire ,User defined

Digital electrode

WTSMDS-MD1900

WTSMDS-MD1900 Optical dissolved oxygen sensor

characteristic

- ♦ intelligent self-monitoring guarantee reliable measured values
- ♦ No flow needed-measurement possible in still water
- ♦ principle of fluorescence, noneed to replace diaphragm and electrolyte
- ♦ No oxygen consumption and no flow rate and agitation requirement, high measurement accuracy

specifications

- ♦ measuring range: 0~20mg/l(0-20ppm)0-200%SAT
- ♦ Repeatability:±0.5%FS
- ♦ T90:60 s
- ♦ Materials: membrane body SUS316L (black titanium plating) fluorescent layer cap; POM
- ♦ process connection: G1
- ♦ cable length: 10m,max 80m(including cable extension)



Digital electrode

DS-NTU-5000

DS-NTU-5000 Turbidity digital electrode

characteristic

- ♦ With precision optical elements
- ♦ Sensor Check self-inspection function of electrodes to ensures reliable operation
- ♦ Good long-term stability
- ♦ Easy Installation and maintenance

specifications

- ♦ measuring range :0-100/500/5000NTU
- ♦ Accuracy: less than $\pm 3\%$ of measured value
- ♦ Repeatability : $\pm 3\%$ of full range
- ♦ Cleaning: self -cleaning
- ♦ Pressure range:0.6MPA
- ♦ Temperature:0-90 °C



ISO

ISO 9001:2008

Winters is a ISO 9001:2008 Corporation. ISO 9001:2008 requires an organization to demonstrate its ability to consistently provide products that meet customer and regulatory requirements, and enhance customer satisfaction through effective application of the system, including processes for continual improvement of the system and the assurance of conformity.



UL/ULC

Underwriters Laboratories and Underwriters Laboratories of Canada maintain a high commitment to public safety and dedication to exceed customer expectations through continual improvement in the delivery of quality services. The organizations develop and publish standards, classifications and specifications for products having a bearing on fire, accident or property hazards. If a product carries the UL mark, it means that UL found the product meeting UL's safety requirements. These requirements are based primarily on UL's own published Standards for Safety.

NACE

NACE

The National Association of Corrosion Engineers recommends practices such as methods of selection, design, installation, maintenance or operation of material or systems where corrosion is a factor. Some recommended practices focus on details of construction of a corrosion control system, methods of treating the surface of materials to reduce corrosion, requirements for using devices to reduce corrosion, and procedures for increasing the effectiveness, safety and economic benefits of an installation or system.

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