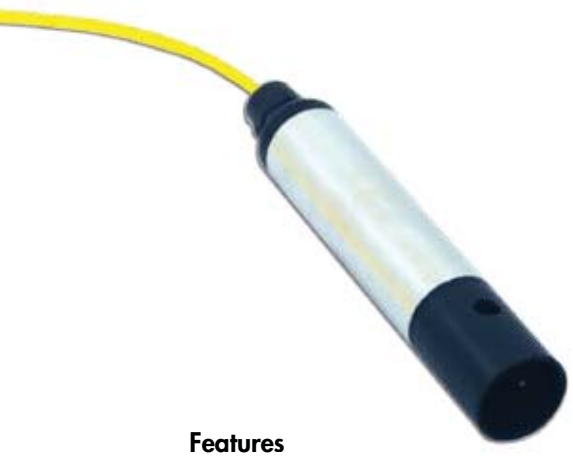
Архангельск (8182)63-90-72
Астана +7(7172)727-132
Белгород (4722)40-23-64
Брянск (4832)59-03-52
Владивосток (423)249-28-31
Волгоград (844)278-03-48
Вологда (8172)26-41-59
Воронеж (473)204-51-73
Екатеринбург (343)384-55-89
Иваново (4932)77-34-06
Ижевск (3412)26-03-58
Казань (843)206-01-48
Калининград (4012)72-03-81
Калуга (4842)92-23-67
Кемерово (3842)65-04-62
Киров (8332)68-02-04
Краснодар (861)203-40-90
Красноярск (391)204-63-61
Курск (4712)77-13-04
Липецк (4742)52-20-81
Магнитогорск (3519)55-03-13
Москва (495)268-04-70
Мурманск (8152)59-64-93
Набережные Челны (8552)20-53-41
Нижний Новгород (831)429-08-12
Новокузнецк (3843)20-46-81
Новосибирск (383)227-86-73
Орел (4862)44-53-42
Оренбург (3532)37-68-04
Пенза (8412)22-31-16
Пермь (342)205-81-47
Ростов-на-Дону (863)308-18-15
Рязань (4912)46-61-64
Самара (846)206-03-16
Санкт-Петербург (812)309-46-40
Саратов (845)249-38-78
Смоленск (4812)29-41-54
Сочи (862)225-72-31
Ставрополь (8652)20-65-13
Тверь (4822)63-31-35
Томск (3822)98-41-53
Тула (4872)74-02-29
Тюмень (3452)66-21-18
Ульяновск (8422)24-23-59
Уфа (347)229-48-12
Челябинск (351)202-03-61
Череповец (8202)49-02-64
Ярославль (4852)69-52-93

www.globalw.nt-rt.ru || gwb@nt-rt.ru

Анализаторы мутности Global Water

Технические характеристики



WQ730 Turbidity Sensor

Rugged Submersible Turbidity Sensor

Features

- In situ turbidity measurement
- Simple and convenient to use
- 4-20 mA output
- Marine grade polyurethane jacketed cable with strain relief
- Rugged stainless steel and Delrin® housing
- Removable light and debris shield
- Ideal for a variety of applications

Specifications

Range	0 to 50 NTU and 0 to 1000 NTU
Accuracy	±1% full scale
Output	4-20mA (Both ranges)
Method	Nephelometer with correction
Operating Voltage	10 to 36 VDC @ 40 MS
Current Draw	30 mA plus sensor output
Warm-up Time	5 seconds minimum
Operating Temperature	14 to 122°F (-10 to +50°C)
Materials	306 stainless steel, Delrin®, polyurethane jacketed cable
Maximum Pressure	30 psi
Light Source	Infrared LED, 880nm
Cable Length	25 ft (7.6 m) standard (optional up to 500 ft (152 m)
Size of Probe	1 ½ inch dia. x 8.5 in long (3.8 cm dia. x 21.6 cm long)
Weight	1 lb (454 g)

Description

Global Water's WQ730 Turbidity Sensor is a highly accurate submersible instrument for in situ environmental or process monitoring. The sensor is ideal for a variety of applications, including river monitoring, stream measurement, reservoir water quality testing, groundwater testing, water and wastewater treatment, effluent and industrial control, and more.

How it Works

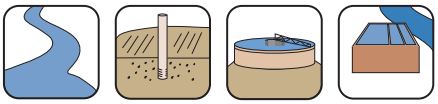
In accordance with USEPA Method 180.1 for turbidity measurement, the WQ730 is a 90 degree scatter nephelometer. The sensor directs a focused beam into the subject water. The light beam reflects off particles in the water, and the resultant light intensity is measured by a photodetector positioned at 90 degrees to the light beam. The detected light intensity is directly proportional to the turbidity of the water. The turbidity sensor uses a second light detector to correct for light intensity variations, color changes, and minor lens fouling.

For environmental monitoring, simply place the sensor directly in the water and position it where the turbidity is to be monitored. For process monitoring, you can place the sensor into a low-pressure pipe for online monitoring using a standard 1.5 inch compression coupler.

Record, Control, and Display

For handheld turbidity monitoring, the WQ770-B Turbidity Meter (page 72) combines the WQ730 with a digital display that reads in either NTU or ppm. You can add recording capabilities to the WQ730 with the GL500 Datalogger (page 122), and you can use the sensor to control external devices with the PC300 Controller (page 132).

Applications



Ideal for river monitoring, stream measurement, reservoir water quality testing, groundwater testing, water and wastewater treatment, effluent and industrial control, and more.

Ordering & Options

Order No.	Description
WQ730	Turbidity Sensor for Open Water (includes 25 ft (7.6 m) cable)
WQEXC	Extra Sensor Cable, per foot (up to 500 ft (152 m))

Please call us for calibration standards.

You may also like . . .

WQ770-B Turbidity Meter
Turbidity sensor and display for simple handheld monitoring.
Page 72

TURB 430 Portable Turbidity Meter
Portable water sample analyzer for accurate turbidity measurements.
Page 73

"The highest good is like water. Water gives life to the ten thousand things and does not strive. It flows in places men reject and so is like the Tao."

– Tao Te Ching

WQ750 Self-Cleaning Turbidity Sensor

Submersible Turbidity Sensor with Analog Output

Description

The WQ750 Self-Cleaning Turbidity Sensor is an excellent choice for turbidity measurements in applications involving surface water, wastewater effluent, raw source water, industrial discharge, and aquaculture.

The heavy-duty WQ750 is constructed of 316 stainless steel with scratch-resistant quartz optical lenses to provide a long, dependable service life. The unit ships complete with 42 feet (12.8 m) of cable and a wiper actuation board.

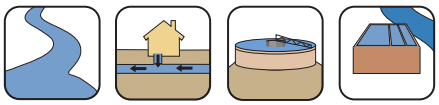
Reliable Sensing and Transmittal

The WQ750 uses a reliable optical sensing system, which produces an analog signal that is enhanced by on-board temperature and ambient light processing. This robust 4-20 mA analog signal is compatible with a host of monitoring and control systems including the PC300 process controller (see page 132) and GL500 dataloggers (starting on page 122).

Innovative Self-Cleaning

The WQ750 maintains its accurate and reliable measurements via a mechanical cleaning device that prevents contamination of the measuring windows. The wiper cycle is controlled by an external contact and allows the WQ750 to match the cleaning cycle to the application. The control board is designed to work with our Global Water GL500 dataloggers (starting on page 122).

Applications



Ideal for monitoring water quality in lakes, rivers, streams, plant effluent, wastewater recycling and discharge, and aquaculture applications.

Features

- Reliable optical measuring process
- Built in wiper to keep sensing surfaces clean
- Directly submersible into basins, channels or open water
- Isolated 4-20 mA output
- Rugged stainless steel sensor body

Specifications

Measuring Principle	90° scattered light with pulsed infrared light
Wavelength	880 nm
Measuring Range	1 to 1000 FNU
Maximum Error	< 1% of measuring range
Repeatability	<1%
Analog Output	4–20 mA, isolated
Signal Filter	10 sec
Control Signal for Wiper	Pulse duration 5 sec / O V
Power Requirement	10 to 24 VDC, max 3W
Sensor Current	~220mA @ 12 VDC
Wiper Current	50 mA
Operating Temp	32 to 122 °F (0 to +50 °C)
Operating Pressure Maximum	87 psi (200 ft (61 m) of water)
Sensor Body	316 stainless steel
Wiper	Rubber
Optical Windows	Quartz glass
Cable	42.5 ft (13 m), submersible, 6-wire w/shield
Dimensions	1.5 inch dia. x 5.75 in long (38 mm dia. x 146 mm long)
Weight	2 lbs (0.9 kg)

Ordering & Options

Order No.	Description
WQ750	Turbidity Sensor (with 42 ft (12.8 m) cable & wiper control)

Please call us for calibration standards.

You may also like . . .

PC300 Controller
Use the WQ750 to control external devices.
Page 132

GL500 Datalogger
Add recording capabilities to the WQ750.
Page 122

WQ750 Installation Notes

When installing the WQ750, please note that reflections from stationary objects in the area of the probe (such as a wall or the ground) can affect measurements at low turbidity levels, causing the probe to falsely provide higher turbidity values.

It is particularly important to take account of this when performing control measurements in small vessels. The distance between the probe and the next wall should be large enough to avoid reflections.

WQ770-b Turbidity Meter

Portable Turbidity Meter with Sensor, LED Screen, and Control Panel

Features

- In situ turbidity measurement
- Portable unit with completely submersible sensor
- Simple and convenient to use
- Factory calibrated for immediate long-term use (recalibration not required for 6-12 months)
- Marine grade cable with strain relief
- Rugged stainless steel and Delrin® sensor housing
- Removable light and debris shield

"The cure for anything is salt water - sweat, tears, or the sea."

– Tagore, a Bengali poet and novelist

"Civilization has been a permanent dialogue between human beings and water."

– Paolo Lugari, Founder of the Gaviotas Community in Colombia

Description

Global Water's WQ770-b Turbidity Meter is a highly accurate instrument ideal for a variety of environmental or process applications without a permanent installation. The meter combines a highly accurate submersible turbidity sensor connected to a handheld display with 25 ft of marine-grade cable (optional cable lengths up to 100 ft are available).

Accurate Sensing

In accordance with USEPA Method 180.1 for turbidity measurement, the meter's turbidity sensor is a 90 degree scatter nephelometer. The sensor directs a focused beam into the subject water. The light beam reflects off particles in the water, and the resultant light intensity is measured by a photodetector positioned at 90 degrees to the light beam. The detected light intensity is directly proportional to the turbidity of the water. The turbidity sensor uses a second light detector to correct for light intensity variations, color changes, and minor lens fouling.

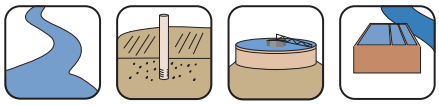
Capable Display and Control

The handheld meter features a six digit LED screen, a 4-button control panel, and an internal lithium battery. The screen will display readings directly in either nephelometric turbidity units (NTU) or parts per million (ppm). The meter also includes an automatic shutoff feature to conserve battery power.

Factory Calibrated

The WQ770-b is factory calibrated to the highest standards and should not require recalibration for six to twelve months. User calibration, when required, is very easy and involves a step-by-step process directed by the display unit.

Applications



Ideal for river monitoring, stream measurement, reservoir water quality testing, groundwater testing, water and wastewater treatment, effluent and industrial measurement, and more.

Specifications

Range	0 to 50 NTU or 0 to 1000 NTU, selectable
Accuracy	±1% full scale
Resolution	12 bit
Method	Nephelometer with correction
Power	9 VDC titanium battery (included)
Operating Temp	32 to 122°F (0 to +50°C)
Materials	306 stainless steel, Delrin, Polyether jacketed cable
Pressure	0 to 30 psi
Light Source	Infared LED, (880 nm)
Cable Length	25 ft standard (optional to 100 ft)
Size of Probe	1 ½ inch dia. x 8.5 inch long (3.8cm dia. x 21.6cm long)
Weight	2 lbs (907 g)

Ordering & Options

Order No.	Description
WQ770-b	Turbidity Meter (includes 25 ft cable)
WQEXC	Extra Sensor Cable, per foot (up to 100 ft)

Please call us for calibration standards.

You may also like . . .

WQ730 Turbidity Sensor
Turbidity sensor with 4-20 mA output.
Page 64

U-50 Multi-parameter Water Quality Meter
Meter for monitoring pH, conductivity, DO, turbidity, salinity, and temperature.
Page 81

Turb 430 Portable Turbidity Meter

Portable turbidity meter for accurate laboratory or field studies.

Description

With the new portable turbidity meters Turb 430 T and Turb 430 IR, the user now has the choice to perform nephelometric measurements at 90° scattered light according to the application and standard required. The Turb 430 IR meter meets the DIN 27027/ISO7027 requirements, the Turb 430 T those of US EPA 180.1. The meter's measuring range is from 0 to 1100 NTU/FNU and is identified automatically. Accurate measurements by the meters in the lower range, e.g. in drinking water are no problem!

The Turb 430 Meters have menu driven 3 point calibration and all measurement functions are easy for even the most inexperienced operator to perform accurate and precise measurements. The calibration is via an AMCO® standards set (0.02-10-1000 NTU). The quality of the measurement results are supported by adjustable calibration intervals with documentation.

The meters are not only a field measuring instruments (especially with the practical field case), but also a "small lab instrument" for applications up to 1100 NTU/FNU and with optimum data management.

Which Light Source Do You Need

An infrared light source minimizes the influence of coloration in a solution, because there is practically no absorption at a wavelength of 860 nm. The detection sensitivity for small particles, on the other hand, is somewhat lower at this wavelength because of the generally lower light scattering of small particles. White light has a higher sensitivity for small particles, however with this source the inherent coloration of the solution has a stronger disturbing effect on the measurement. The IR measurement source is required for portable turbidity meters to meet DIN ISO standards, while turbidity meters using a tungsten white light measuring source are required by the US EPA.

Specifications

	Turb 430 IR	Turb 430 T
Measuring Principle	Nephelometric measurement according to DIN EN ISO 7027	Nephelometric measurement according to US EPA 180.1
Light Source	Infrared LED	White light tungsten lamp
Measuring Range:	0.01 to 1100 FNU/NTU	0.01 to 1100 FNU/NTU
Resolution	0.01 from 0.01 to 9.99 NTU/FNU 0.1 from 10.0 to 99.9 NTU/FNU 1 from 100 to 1100 NTU/FNU	0.01 from 0.01 to 9.99 NTU/FNU 0.1 from 10.0 to 99.9 NTU/FNU 1 from 100 to 1100 NTU/FNU
Accuracy	±0.01 or ±2% of the measured value	±0.01 or ±2% of the measured value from 0 to 500 NTU, ±3% of the measured value from 500 to 1100 NTU
Reproducibility	0.5% of the measured value	1% of the measured value
Response Time	4 seconds	7 seconds

Calibration	Automatic 3-point calibration
Display	Graphic LCD
Languages	English, French, Spanish, and German
Operating Temp	32° to 122°F (0° to 50°C)
Storage Temp	13° to 149°F (-25° to 65°C)
Allowable Relative Humidity	Yearly mean 75%
Power Source	4 x 1.5 V AA batteries
Battery Life	~3000 measurements (Turb 430IR), ~2000 measurements (Turb 430T)
Size (LxWxH)	9.3x3.4x4.6 inches 236x86x117 mm
Weight	1.3 lb (0.6kg) (without batteries)
Ingress protection	IP 67
Test certificates	cETLus, CE, FCC

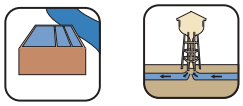
Ordering & Options

Order No.	Description
Turb 430T	Portable Turbidity Meter (EPA)
Turb 430IR	Portable Turbidity Meter (ISO)
600561	Turb 430T Calibration kit Includes 0.02, 10, and 1000 NTU solution
600560	Turb 430IR Calibration kit Includes 0.02, 10, and 1000 NTU solution

Features

- Meets ISO 7027/EPA 180.1 for Turbidity Meters
- Highly precise and accurate at low levels
- Lab accuracy & comfort in a portable field instrument
- Supports multiple languages

Applications



Drinking water, wine industry, process control, laboratory use

"In an age when man has forgotten his origins and is blind even to his most essential needs for survival, water along with other resources has become the victim of his indifference."

– Rachel Carson

Архангельск (8182)63-90-72
Астана +7(7172)727-132
Белгород (4722)40-23-64
Брянск (4832)59-03-52
Владивосток (423)249-28-31
Волгоград (844)278-03-48
Вологда (8172)26-41-59
Воронеж (473)204-51-73
Екатеринбург (343)384-55-89
Иваново (4932)77-34-06
Ижевск (3412)26-03-58
Казань (843)206-01-48
Калининград (4012)72-03-81
Калуга (4842)92-23-67
Кемерово (3842)65-04-62
Киров (8332)68-02-04
Краснодар (861)203-40-90
Красноярск (391)204-63-61
Курск (4712)77-13-04
Липецк (4742)52-20-81
Магнитогорск (3519)55-03-13
Москва (495)268-04-70
Мурманск (8152)59-64-93
Набережные Челны (8552)20-53-41
Нижний Новгород (831)429-08-12
Новокузнецк (3843)20-46-81
Новосибирск (383)227-86-73
Орел (4862)44-53-42
Оренбург (3532)37-68-04
Пенза (8412)22-31-16
Пермь (342)205-81-47
Ростов-на-Дону (863)308-18-15
Рязань (4912)46-61-64
Самара (846)206-03-16
Санкт-Петербург (812)309-46-40
Саратов (845)249-38-78
Смоленск (4812)29-41-54
Сочи (862)225-72-31
Ставрополь (8652)20-65-13
Тверь (4822)63-31-35
Томск (3822)98-41-53
Тула (4872)74-02-29
Тюмень (3452)66-21-18
Ульяновск (8422)24-23-59
Уфа (347)229-48-12
Челябинск (351)202-03-61
Череповец (8202)49-02-64
Ярославль (4852)69-52-93

www.globalw.nt-rt.ru || gwb@nt-rt.ru