

### Description

The WQ440 turbidity sensor is rugged and compact instrument suited for measuring turbidity in surface and underground waters. The WQ440 turbidity sensor consists of a 90 degree scatter nephelometer and a photodetector positioned at 90 degrees to the light beam.

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

Since the output of the instrument is electrical, the signal can be read with a manual read out unit like the DATAVIEW, automatically, with a data logger such as the MINILOG, MYLOG, NATUN system or any other data logger provided by SIM STRUMENTI. Every sensor is provided with a calibration certificate that attests the results of the test performed and all electromechanical features

### Applications

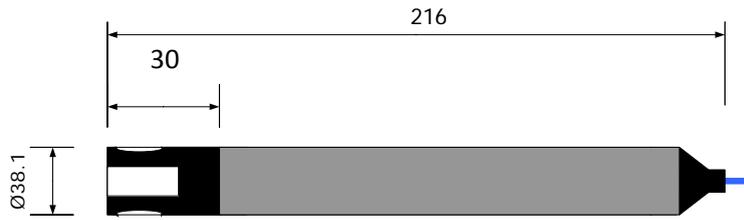
Turbidity measurement in wells, tanks, flumes, streams etc.

**USEPA Method 180.1 for turbidity measurement**

**Dual 4-20 mA Output for 2 range (0-50 NTU e 0-1000 NTU)**

**Rugged stainless steel and Delrin sensor housing**





## Technical features

|                       |                         |                             |
|-----------------------|-------------------------|-----------------------------|
| Model                 | <b>WQ440</b>            |                             |
| Range                 | 0-50 NTU and 0-1000 NTU |                             |
| Light Source          | Infrared LED, (880nm)   |                             |
| Supply                | 10÷36 Vcc               |                             |
| Output                | 2 output 4÷20 mA        |                             |
| Linearity             | ±1% FS                  |                             |
| Consumption           | 30 mA + sensor output   |                             |
| Operating temperature | -10 ÷ + 50 °C           |                             |
| Warm up               | 5 sec                   |                             |
| Max Pressure          | 2 bar                   |                             |
| Dimensions            | 38 x 216 mm             |                             |
| Weight                | 0.454 Kg                |                             |
| Material              | Case                    | stainless steel / polyether |
|                       | Sensor housing          | Delrin                      |

WQ440\_EN ED01/14



SIM STRUMENTI SNC  
 Via Merendi 42  
 20010 Cornaredo (MI) - ITALY  
 Tel .: +39 02 97003039  
 Fax : +39 02 97290167  
 www.simstrumenti.com  
 sim@simstrumenti.com



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