

# TU/TSS 3000CS/CSE is an on-line Turbidimeter/TSS monitor, designed to

work in difficult water applications, waste water and process applications containing high concentrations of solids and where auto cleaning is needed.

The Neophelometric sensor can be Infra-red based or white light and meets the ISO-9027/EPA standards for turbidity measurements in the range of 0-4000 NTU and 0-10,000 mg/L as TSS with autoranging capability.

The sensor has a special measurement system that will not only measure the turbidity or TSS as well as detecting any dirt on the sensor surface and compensate the reading. When the sensor becomes very dirty, a sensor alarm will be activated and the massage "clean sensor" will appear on the display.



The sensor is installed in a flow cell with a  $\frac{1}{2}$ " inlet and outlet, flushing valve for empting the flow cell during the automatic wash of the sensor and includes flow adjustment and air bubbles elimination.

During the autoclean of the sensor with air, the flushing valve is open and empties the remaining water and solids.

The controller has 3 control/alarm outputs, sensor error output and auto clean output (all dry contacts).

The isolated 4-20 mA output can be read by a data logger or computer based systems.

Calibration can be made either by comparing the reading with a portable instrument or directly with Formazin solution inside the sample cell. The zero calibration is being preformed automatically by the controller, right before each measurement is being taken (3 readings per second).

The analyzer is provided with an IP-65 enclosure and a transparent door. The controller allows key board lock done in the software.



# HEFER SYSTEMS & CONTROLS LTD.

Delrin Acrylic 7 pin, IP67 0-50°C 0-6 bar 10 sec.

IR 890 (TU320)

Neophelometric

dry air, 1.5 bar

White light (TU321) (tungsten)

• Water & Waste Water treatment Tech.

Process Analytical Equipment

#### PARAMETER

## RANGE/UNITS/DESCRIPTION

#### CONTROLLER

Units/Range Resolution Accuracy

Power supply

Analog output

Inputs Outputs

Display Enclosure Plate mounting

0-4000 NTU, 0-10,000 mg/l (Sio2)
0.05% of scale
+/-2% of the reading (0-40 NTU)
+/-5% of the reading (40-400 NTU)
+/-10% of the reading (400-4000 NTU)
110/220 +/- 10%, 50/60 HZ
Neophelomtric turbidity/TSS sensor
4-SPDT, 5A, dry contact (High/low alarm, sensor alarm and auto clean
activation)
Isolated 4-20 Ma
LCD, 1x16
IP-65, 25x25x20cm
60x40cm, PVC

# TU320 & TU321 SENSORS

Body
Optical window
Cable connector
Temp. range (sample & ambient)
Pressure
Response time
Light source

Measuring method Autoclean

## **TU420 FLOW CELL**

Body Temp. range Pressure Flow Inlet/Outlet Dimensions: Delrin 0-50°C 6 bar max. Adjustable, 0.2-25 L/h 1/2"x/1/2" 40x20x20 cm



#### **Ordering Information:**

TU-3000CS – Turbidity Controller + autoclean flow cell and sensor, IR TU-3000CSE – Turbidity Controller + autoclean flow cell and sensor, White light

V.2.13

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