

Turbidity Plus™

with Integrated Wiper



Turbidity Plus Highlights

- Integrated Wiper Package
- Low Power Consumption
- Easy-to-integrate Configurations
- Wide range of detection

Turbidity Plus™ with Integrated Wiper

Turbidity Plus™ is an accurate single-channel turbidity sensor with an integrated, user-controlled wiper motor. It is designed for integration with multiparameter systems and dataloggers from which it receives power and wiper motor triggers at user-defined intervals. Turbidity Plus is linear up to 3,000 NTU delivering a voltage response proportional to the turbidity of the sample which can be correlated to nephelometric turbidity unit (NTU) concentrations by calibrating the sensor using AMCO Clear Turbidity Standards. Deployable to 200 meters, Turbidity Plus is available in a variety of configurations to facilitate integration.

Ordering Information

AVAILABLE CONFIGURATIONS FOR TURBIDITY PLUS WITH INTEGRATED WIPER MOTOR

| | |
|--------------|--|
| 2180-000 | With Connector, With Wiper Assembly (wiper hub, arm, and rubber brush) |
| 2180-000-NC | No Connector, With Wiper Assembly |
| 2180-000-NCW | No Connector, No Wiper Assembly |
| 2180-000-NH | No Housing, No Connector, With Wiper Assembly |
| 2180-000-NHW | No Housing, No Connector, No Wiper Assembly |
| 2185-000 | 500 NTU With Connector, With Wiper Assembly |

RECOMMENDED CALIBRATION STANDARDS

| | |
|------|--|
| 8506 | Amco Clear Turbidity Standard, 10 NTU |
| 8507 | Amco Clear Turbidity Standard, 100 NTU |
| 8620 | Amco Clear Turbidity Standard, 1,000 NTU |
| 8621 | Amco Clear Turbidity Standard, 3,000 NTU |

Available at www.gfschemicals.com

CABLES

*The Turbidity Plus 8-pin connector can only be mated with the following cables

| | |
|----------|---|
| 2200-170 | 0.6 Meter Pigtail Cable with Locking Sleeve |
| 105-0552 | 5 Meter Pigtail Cable with Locking Sleeve |
| 105-0555 | 10 Meter Pigtail Cable with Locking Sleeve |

Contact Us

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Reliable Instruments for an Unreliable World

Turbidity Plus™

with Integrated Wiper



Physical Specifications

Diameter: 1.185", 3.01 cm (Delrin)
Length:
Housing only: 4.35", 11.05 cm
Housing w/ Connector & Wiper: 6.10", 15.49 cm
Weight w/ Connector & Wiper: 4.9 oz; 138 g
Temperature Range:
Ambient: 0 to 50 deg C
Water Temp: -2 to 50 deg C
Depth Range: 200 meters

Electrical Specifications

Signal Output: single gain, 0 – 5 VDC
Supply Voltage Range: 3 – 15 VDC
Maximum Peak Current: 100 mA
Settling Time from power on: $T_{99} = < 3$ seconds
Power Requirements:
@12V, 140 mW (180 mW for 500 NTU) signal only
@12V, 230 mW (280 mW for 500 NTU) while wiper rotates

3,000 NTU Performance Specifications

Linearity: 0.99R²
MDL: 0.5 NTU
Range: 0 – 3,000 NTU
Precision:
0 – 10 NTU (+/- 0.1 NTU)
10 – 1000 NTU (+/- 0.4 NTU)
> 1000 NTU (+/- 0.04% of NTU)
Resolution: Datalogger Specific
*Accuracy: Calibration Specific (Turbidity Plus sensors are not factory calibrated)

500 NTU Performance Specifications

Linearity: 0.99R²
MDL: 0.05 NTU
Range: 0 – 500 NTU
Precision:
0 – 50 NTU (+/- 0.05 NTU)
50 – 500 NTU (+/- 0.25 NTU)
Resolution: Datalogger Specific
*Accuracy: Calibration Specific (Turbidity Plus sensors are not factory calibrated)

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