See a clearer picture of your network with NephNet.

The ATi NephNet turbidity sensor and sensor flowcell

Portable, online turbidity monitoring.

Following extensive research and listening to our customers requirements, ATi UK's Innovation Hub have re-engineered and developed a superior solution to help you see a clearer picture of turbidity in your network.

When it was released, the original NephNet revolutionised the water industry, but with our new NephNet solution, turbidity monitoring just got better.

Our specialist knowledge in the sector of network monitoring allows us to lead the way in portable, online turbidity monitoring and take an already great product and turn it into something genuinely unique.

Tried and trusted turbidity sensor technology

Using our existing and proven turbidity sensor means you will benefit from ATi's expertise in the water quality sector. Our knowledge in this field is unrivalled, ensuring the ability to generate accurate and reliable data, time after time.

NephNet offers a range of benefits to help water companies control their mains flushing and controlled planned cleaning, including continuous remote monitoring of turbidity, better accuracy at lower levels and fast connection to water mains via hydrants.

Offering the same measurement performance as traditional fixed monitors, NephNet's enclosure never needs to be opened, generating accurate, live data which can be easily accessed via the WaterCore web portal for easy access.

Technolog Cello 4S RTU

The Nephnet's remote telemetry unit (RTU), is a trusted and reliable Technolog unit that:

- Powers and controls the NephNet turbidity sensor
- Remote set-up, monitoring and control
- Stores turbidity readings
- Transmits data to the web portal

NephNet key features

- Powerful battery allows continuous powering of the NephNet for high frequency data readings during mains flushing exercises or long term deployment for turbidity investigation programmes.

- Web portal allows live data to be displayed, storage of GPS and descriptive location data. Data collection into the web portal, configuration changes for data reading and upload intervals.

- Bi-directional communication allows over-the-air firmware updates and configuration changes to be made when the NephNet communicates with the RTU's web portal.

- Alarm thresholds can be set that will trigger an immediate connection to the web portal to upload data & email the alarm details to predefined contacts.

Technical Specifications:

Sensor	
Range	4/400 NTU (0-4.000, 0-40.00, 0-400.0), Factory default is 0 – 20.00 NTU*
Accuracy	± 5% of reading or ± 0.02 NTU whichever is greater
Linearity	0.1% of F.S.
Operating Conditions	-20° to +55° C., 0-95% R.H. noncondensing
Measurement Angle	90-degree scatter (nephelometric)
Response Time	95% in 10 seconds
Sensor Power	9-36 VDC
Sensor Temperature Limit	0 - 50° C
Sensor Pressure Limit	0 - 6 bar
Sensor Output Range	400 mV – 2000 mV
Connections	7-conductor sensor cable, 1 meter
Sensor Materials	Delrin body, Acrylicoptical windows
Flowcell Materials	PVC
Flowcell Connections	6 mm tube fittings

Technolog Cello 4S RTU	
Memory	512K, allocable between channels as required (max 64K per channel)
Data Transmission	2G, 3G, NB-IoT and LTE Cat M1 networks (subject to build option) 1 min to 1 month at programmable date and time
Temperature	Operating ambient temperature -20 °C to + 50 °C
Modem	Integral antenna, optional external antenna, user replaceable SIM card
IP Rated	IP68 (submersion at 1m depth for 48 hours)
Power	User replaceable lithium battery pack, typical life > 5 years depending on use
Dimensions	149mm x 146.5mm (h)
Weight	750g

*ATi can configure the range to whatever is required, within the ranges listed above.

The NephNet portable turbidity monitor is available in a handy carry that includes:
Turbidity sensor & flow cell, telemetry enclosure, NRV (Non-return valve),
PRV (pressure reducing valve), hydrant hose.

Optional:
Hydrant cap, LCD display

ATi UK is a leading provider of engineered, analytical sensor monitoring solutions for water and gas applications and data insights. Our pioneering and industry leading range of Network Monitors, Water Quality Monitors and Gas Detectors provide innovative solutions for the most demanding of applications.

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