

## Applications

Fresh Surface Water  
Groundwater



## Low maintenance UV nitrate sensor

Reliable and high quality nitrate measurement

**Individual absorption channels to deliver cost-effective data**

**Separate reference signal provides greater accuracy**

**Smart channel processing reduces drift and eliminates bias**

**Anti-fouling wiper minimizes likelihood of noisy data from debris**

**Precise high quality stainless steel construction for a robust instrument**

**Important - this sensor is only for use in environmental fresh surface water and groundwater applications**

### Move locations with ease

The OTT ecoN can be easily moved from one environmental monitoring site to the next due to its 4 different adaptable path lengths. It is portable thanks to its integrated logger and low power requirements.

### Worry-free operation

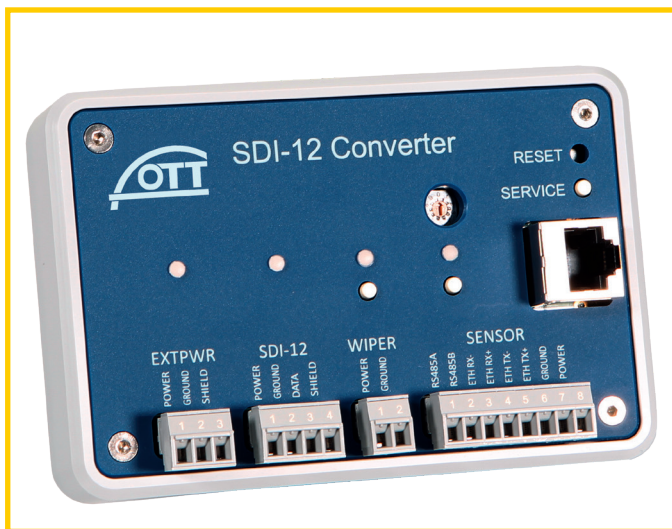
The sensor does not require annual calibration, making it an ideal solution to 'set and forget'. It also leverages browser based software for greater flexibility in viewing and accessing data without a need for software installation through IT.

### Access data remotely with ease

Access data via Modbus or SDI-12 protocols. For SDI-12, the OTT ecoN Converter accessory allows you to access your data by acting as an interface between your OTT ecoN and the SDI-12 interface of the peripherals. View nitrate measurements and sensor status information in near real-time.

# Technical Specifications

Feature	Value
Light source	Xenon flash lamp
Detector	4 photo diodes + filter
Measurement principle	Attenuation
Optical path	1 mm, 2 mm, 5 mm, 10 mm
Parameter	NO3-N, NO3, NOx-N, NOx (calibrated with NO3 standard solution)
Measuring range	1 mm path: 0.5...60 mg/L NO3-N 2 mm path: 0.25...30 mg/L NO3-N 5 mm path: 0.1...12 mg/L NO3-N 10 mm path: 0.05...6 mg/L NO3-N
Measurement accuracy	1 mm = ± (5 % + 1.0 mg/L NO3-N) 2 mm = ± (5 % + 0.5 mg/L NO3-N) 5 mm = ± (5 % + 0.2 mg/L NO3-N) 10 mm = ± (5 % + 0.1 mg/L NO3-N)
Turbidity compensation	Yes
Data logger	2 GB
T100 response time	20 s
Measurement interval	≥ 10 s
Housing material	Stainless steel (1.4571/1.4404)
Dimensions (L x Ø)	470 mm x 48 mm (10 mm path) 18.5 inch x 1.9 inch (with 10 mm path)
Weight	3 kg (6.6 lbs)
Interface digital	Ethernet (TCP/IP) RS-485 (Modbus RTU) SDI-12
Power consumption	≤ 7 W
Power supply	12...24 VDC (± 10 %)
System compatibility	Modbus RTU
Warranty	US: 2 years
Max. pressure	3 bar (43.5 psig)
Protection type	IP68 NEMA 6P
Sample temperature	+2...+40 °C



OTT ecoN Modbus to SDI-12 Protocol Converter



Local access to settings with the G2 interface