



TresCon[®] Uno

Online-Analysis –

reliable · compact · economical

- Reliable TresCon[®] Technology
- Compact dimensions
- Economical
- Simple operation
- Easy to Use
- Easy Service Access
- Connection to PROFIBUS-DP possible



The new TresCon[®] Uno uses a single channel version of our popular multi channel TresCon[®] Analyzer.

The TresCon[®] Uno instruments are designed for control and monitoring at waste water treatment plants. The compact size of TresCon[®] Uno at a reasonable price offers to the user a good price-performance-ratio for the measurement of nutrient parameters.

System Description:

TresCon[®] Uno consists of a basic unit ①, an analyzer-module ②, and a reagent tray ③. System can be wall mounted.



TresCon® ON 510

Nitrite Analyzer Module



On-line nitrite measurement

- Observation of the nitrification process
- Monitoring nitrite effluent values
- Measurement checks in drinking water treatment
- Monitoring nitrite pollution in natural waters
- Monitoring of critical values in fish farming

Measuring Principle

The measuring principle of the NO₂ analyzer module is based on the azo dye method. A reagent reacts with nitrite to color the sample solution pink. The intensity of the pink color is proportional to the nitrite concentration in the sample and is measured by a double-beam reference photometer. An additional manual correction facility allows the system to be adapted to plant-specific characteristics so that a high degree of measuring accuracy can be achieved even with strongly colored samples.

TresCon® ON 510

- Continuous background compensation
- Reliable and Accurate – 2-beam reference photometer
- Selectable measuring intervals: 10, 15 or 20 min
- Can be used in weakly polluted water without sample preparation

	Measuring Range	
	mg/l	µmol/l
NO ₂ -N	0.005 - 1.200	0.40 - 90
NO ₂ ⁻	0.020 - 4.000	0.40 - 90

Technical Data

Resolution (Display)	Range: 0.005 ... 1.200 mg/l : 0.001 mg/l 0.020 ... 4.000 mg/l : 0.001 mg/l 0.40 ... 90.00 µmol/l : 0.1 µmol/l
Coefficient of variation for method	1%
Response Time	< 5 min to measured value (after alteration in concentration at module input)
Measuring interval	5, 10, 15, and 20 min intervals selectable, AutoAdapt, Interval-Program
Calibration	Automatic 2-point calibration, time and interval selectable
Background Correction	Continuous background compensation based on new WTW algorithm
Sample input	Approx. 0.06 l/h, solid content < 50 mg/l
Consumption	Reagent, 1 l: 20/40/80 days with 5/10/20 min measuring interval Standard B, 1 l: 80 days with 24 h calibration interval Cleaning solution, 1.5 l: 45 days with 24 h cleaning interval
Maintenance Interval	Every 6 months

Ordering Information

		Order No.
ON 510	Separate TresCon® analyzer module for nitrite for extension of an existing TresCon® system (requires 1 measuring place)	820 009
TresCon® N 511	TresCon® basic instrument with analysis module ON 510 for nitrite (wall mounting, space for 2 further modules)	8A-30030
TCU/N511	TresCon® Uno single parameter system nitrite with analysis module ON 510	820 103
Accessories and consumables see brochure "Product Details"		



Operation safe and Service friendly:

Many automatic diagnosis functions help the user with operation and maintenance. The modular design allows for the quick and easy exchange or replacement of modules.

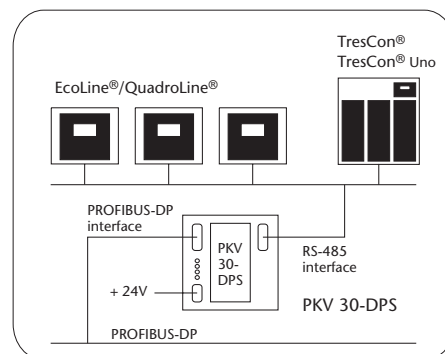
Maintenance and Service

TresCon® systems are service-friendly requiring little or no maintenance. The numerous useful system functions are easily accessed and changed. The operator is also prompted as to service intervals automatically. It has also been designed for easy access and maintenance.

The Instruments include:

- big graphical display
- three 0/4-20 mA outputs
- 12 relay interfaces
- RS 232 interfaces
- RS 485 interfaces
- different controller functions (PID, pulse-width, frequency)

Connection to PROFIBUS-DP via Protocol Converter



Technical Data

	TresCon® Uno	
Measuring ranges	Ammonium:	0.10 ... 1000 mg/l NH ₄ -N
	Nitrate:	0.10 ... 60 mg/l NO ₃ -N
	Nitrite:	0.05 ... 1.200 mg/l NO ₂ -N
	Orthophosphate Range 1:	0.05 ... 3.00 mg/l PO ₄ -P
	Orthophosphate Range 2:	0.10 ... 10.0 mg/l PO ₄ -P
	Orthophosphate Range 3:	0.10 ... 25.0 mg/l PO ₄ -P
	Nitrate/SAC:	0.10 ... 60 mg/l NO ₃ -N / 0.10 ... 200 m ⁻¹
Calibration	Automatic 2-point-calibration (works calibration for N211 and S211)	
Measurement intervals	Cont., 5, 10, 15, 20, 25, 30 min to be set depending on the parameter	
Sample preparation	Depending on the application: none, PurCon® or PurCon® IS	
Mains	230 VAC ± 10%; 50 Hz / 115 VAC ± 10%; 50/60 Hz	
Operation temperature:	32 ... 104 °F (0 ... 40 °C)	
Dimensions, weight (W x H x D, lb/kg)	Analyzer:	24.1 x 30.5 x 13 in. (612 x 775 x 329 mm), approx. 77.2 lb/35 kg
	Reagent tray:	23.2 x 2 x 14.2 in. (590 x 50 x 360 mm), approx. 37.5 lb/17 kg

Ordering Information

			Order No.
TCU/A111	TresCon® Uno - Ammonium	NH ₄ -N	820 101
TCU/N211	TresCon® Uno - Nitrate	NO ₃ -N	820 102
TCU/N511	TresCon® Uno - Nitrite	NO ₂ -N	820 103
TCU/P211-MB1	TresCon® Uno - Orthophosphate Range 1	PO ₄ -P/MB1	820 104
TCU/P211-MB2	TresCon® Uno - Orthophosphate Range 2	PO ₄ -P/MB2	820 105
TCU/P211-MB3	TresCon® Uno - Orthophosphate Range 3	PO ₄ -P/MB3	820 106
TCU/S211	TresCon® Uno - Nitrate/SAC	NO ₃ -N / SAC	820 107