

## EZ7703 Total Nitrogen Analyser



**Produktnr:** SEK Pris: 

## Online, automatic monitoring of Total Nitrogen (TN) in wastewater and general water applications

The EZ7700 Series of Online TN Analysers meet the needs for fast, convenient and reliable monitoring of the regulatory sum parameter Total Nitrogen in wastewater and surface water applications.

Ammonia, nitrate and nitrite are three key nitrogen species that play an important role in decomposition of organic material in water and biological water treatment in particular. While data on individual levels of these provide operators of WWTP's insight in the biochemical processes, other organic and inorganic forms of nitrogen may also be of significance. Total Kjeldahl Nitrogen (TKN) was originally developed as a measure of organic nitrogen but in practice it was often considered as synonymous with Total Nitrogen (TN) due to the lack of other available technologies. Still today, TN is often confused with TKN.

The EZ7700 Series of Online TN Analysers were developed in the framework of a research project to provide operators and utilities a viable alternative for the complex and time-consuming TKN method. TN as measured by the EZ7700 comprises all components, organic and inorganic, of the nitrogen cycle by the analyser's proprietary sample digestion technique, now available in an industrial mainframe with a compact footprint:

- Full oxidation of all nitrogen species
- Smart automatic features
- Control and communication via industrial panel PC
- Standard 4 20 mA signal output with alarm processing
- Communication supporting Ethernet connectivity to Modbus TCP/IP
- Multiple stream analysis

There are many additional options available. Please contact Hach for more details.

## Specifikationer

Analoga utgångar:	Active 4 - 20 mA max. 500 Ohm load, standard 1, max. 8 (option)
Antal provströmmar:	1, 2, 4, or 8
Automatisk rengöring:	Ja
Certifieringar :	CE compliant / UL certified
Cooling water:	Flow rate approx. 5 L/h; temperature max. 30 °C; pressure max. 0.5 bar
Cykeltid:	30 min including digestion of 10 min (standard)

Demineralised water:	For rinsing
Detektionsgräns:	$\leq$ 500 µg/L
Digital outputs:	Optional: Modbus (TCP/IP, RS485)
Dimension (H x B x D):	690 mm x 465 mm x 330 mm
Dränering:	Atmospheric pressure, vented, min. Ø 32 mm
Earth connection:	Dry and clean earth pole with low impedance (< 1 Ohm) using an earth cable of > 2.5 mm <sup>2</sup>
Garanti :	24 månader
Instrument air:	Dry and oil free according to ISA-S7.0.01-1996 quality standard for instrument air
Kalibrering:	Automatic, 2-point; frequency freely programmable
Larm:	1 x malfunctioning, 4 x user-configurable, max. 24 VDC/0.5 A, potential free contacts
Material:	Hinged part: Thermoform ABS, door: PMMA
	Wall section: Galvanised steel, powder coated
Mätmetod:	Colorimetric measurement at 546 nm using hydrazine reduction and NEDD colour solution after persulphate digestion in alkaline medium, conform with APHA 4500-N
Matningsspänning:	230 VAC, 50/60 Hz
	120 VAC, 50/60 Hz
	Max. power consumption: 440 VA
Mätområde:	0.5 - 20 mg/L TN
Modell:	EZ7703
Omgivningstemperatur:	10 - 30 °C, $\pm$ 4 °C deviation at 5 - 95% relative humidity (non-condensing)
Parameter:	Total Nitrogen (TN)
Precision:	Better than 3% full scale range for standard test solutions
Prov: tryck:	By external overflow vessel
Provflödeshastighet:	100 - 300 mL/min
Provkvalitet:	Maximum particle size 100 $\mu$ m, < 0.1 g/L; Turbidity < 50 NTU
Provtemperatur:	10 - 30 °C
Reagent Requirements:	Keep between 10 - 30 °C
Skyddsklass:	Analyser cabinet: IP55 / Panel PC: IP65
Störningar:	Antimony (III), Bismuth (III), Chloroplatinate, Gold (III), Iron (III), Lead (II), Mercury (II), Metavanadate, and Silver (I) can precipitate with Nitrate. The presence of Copper (II) may decompose the diazonium salt which results in a low result. Strong oxidising agents. NCl <sub>3</sub> results in a false red colour. Large amounts of colour and turbidity interfere. Fats, oil, proteins, surfactants and tar.
Vad ingår i leveransen:	EZ7703 Total Nitrogen Analyser, Instruction Manual, 1 x Double Bit Door Key, 1 x Mounting Brackets, 1 x Assembly Container 2.5L (Buffer Solution), 2 x Assembly Container 5L (Oxidation B & Reductor Solution), 1 x Assembly Container 10L (Oxidation A Solution) and 1 x Assembly Glass Reagent Container 2.5L (Colour Solution)
Validation:	Automatic; frequency freely programmable
Vikt :	25 kg

## Vad finns i förpackningen

EZ7703 Total Nitrogen Analyser, Instruction Manual, 1 x Double Bit Door Key, 1 x Mounting Brackets, 1 x Assembly Container 2.5L (Buffer Solution), 2 x Assembly Container 5L (Oxidation B & Reductor Solution), 1 x Assembly Container 10L (Oxidation A Solution) and 1 x Assembly Glass Reagent Container 2.5L (Colour Solution)