

QP1680 TOC/TN_b High-Temperature Laboratory Analyzer



The QP1680 Analyzer measures Total Organic Carbon (TOC) and Total Nitrogen (TN_b) in one sample.

The QP1680 is available as a combined TOC and TN_b analyzer or for the individual parameters TOC or TN_b.

The most important features include:

- Direct sample injection eliminates sample contact with valves and the built-in injection syringe, which minimizes the risk of sample carry-over.
- Large diameter sample aspiration tubing can handle particles up to 800 µm, expanding possible applications and reducing clogging.
- Integrated stirrer for each sample position homogenizes particle-containing samples before injection.
- Small footprint with integrated 65-position auto-sampler requires less space in the laboratory (an auto-sampler with 96 positions is also available as an alternative).
- Simple operation, data analysis and system diagnosis thanks to an intuitive software package.

Technical Data*

Model	QP1680-TOC	QP1680-TOC/TN _b	QP1680-TN _b
Parameter	TOC	TOC, TN _b	TN _b
Oxidation Method	Catalytic combustion at 680 °C	Catalytic combustion at 720 °C	Catalytic combustion at 720 °C
Measurement Method	NDIR (non-dispersive Infrared Detection)	TOC: NDIR (non-dispersive Infrared Detection) TN: Chemiluminescence	Chemiluminescence
Analysis time	Approx. 3 minutes	Approx. 4 minutes	Approx. 3 minutes
Gas consumption	200 mL/min*	250 mL/min**	200 mL/min
		<i>**Sample preparation for NPOC determination requires additional 300 mL/min.</i>	
Gas specifications	Oxygen or synthetic air: minimum 99.998% (4.8) at 3 - 10 bar		
Temperature	Furnace temperature max. 1050 °C (depending on configuration)		
Range	TC, TIC, NPOC, TN _b : 0 - 30000 mg/L		
Lower Limit of Detection (LOD)	TC, TIC, NPOC: 50 µg/L TN _b : 20 µg/L		
Repeatability	Up to 10 mg/L TC, TIC, NPOC, TN: < 5% > 10 mg/L TC, TIC, NPOC, TN: < 2%		
Sample Volume	10 - 1000 µL		
Ambient Temperature	-20 - 60 °C		
Operating Conditions	20 - 30 °C; 20 - 80% relative humidity (non-condensing)		
Pollution Degree	2		
Norms and Standards	TOC / NPOC: ASTM D7573, EN 1484, EPA 415.1, EPA 9060A, ISO 8245, SM 5310B, NEN-ISO 20236 TN _b : ASTM D8083, EN 12260, ISO 11905-2, NEN-ISO 20236		
Power Supply	Analyzer: 100 - 240 VAC, 50/60 Hz, 16 A, with protective grounding PC: 100 - 240 VAC, 50/60 Hz, 1.6 A, with protective grounding Monitor: 100 - 240 VAC, 50/60 Hz, 1.6 A, with protective grounding		
Power	Analyzer: 750 W max. PC: 90 W max. Monitor: 100 W max.		
Dimensions	440 mm x 380 mm x 700 mm (H x W x D)		

**Subject to change without notice.*

Order Information

Analyzers

- LPV448.99.00001** QP1680 High-Temperature TOC Analyzer, with auto sampler, 65 positions
- LPV448.99.00501** QP1680 High-Temperature TOC Analyzer, with auto sampler, 96 positions
- LPV448.99.01001** QP1680 High-Temperature TOC/TN_b Analyzer, with auto sampler, 65 positions
- LPV448.99.01501** QP1680 High-Temperature TOC/TN_b Analyzer, with auto sampler, 96 positions
- LPV448.99.02001** QP1680 High-Temperature TN_b Analyzer, with auto sampler, 65 positions
- LPV448.99.02501** QP1680 High-Temperature TN_b Analyzer, with auto sampler, 96 positions



Consumables & Spare Parts

- SMKIT500000** QP1680 TOC/TN_b Starter Package
- SMKIT501000** QP1680 Consumables Kit, 2500 analysis
- SMKIT501100** QP1680 Consumables Kit, 5000 analysis
- SMKIT501200** QP1680 Consumables Kit, 10000 analysis
- SMSYS503000** Solids Module for QP1680 TOC/TN_b Analyzer
- SMKIT503000** Solids Module Starter Package for QP1680 TOC/TN_b



Computer

- SMCOM100700** LIMS License Key for TEIS Software

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