SKALAR

Formacs^{HT}

Total Organic Carbon Analyzer

General Characteristics

Analytes	Total Carbon (TC), Total Inorganic Carbon (TIC), Total Organic Carbon (TOC), Non Purgable Organic Carbon (NPOC), Purgable Organic Carbon (POC), Dissolved Organic Carbon (DOC)
Method	High temperature catalytic combustion with Infra Red Detection (NDIR)
Samples	Drinking-, ground-, waste-, sea-, cooling-, surface-, pharmaceutical waters, industrial production etc.
Sample introduction	By automated septumless rotary injection port with integrated wash position for sample line and injection needle
Compliancy	EPA 415.1., Standard methods 5310B, DIN 38409 H3, ASTM D-5173, USP <643>, ISO 8245, EN 1484, USEPA 9060, etc.

Operational and Performance Characteristics

Measuring range	Up to 25,000 mg/l C
Detection limit	0.05 mg/l C (lower detection limits can be achieved but depend on laboratory conditions)
Reproducibility	Ranges < 5 ppm within 2% f.s. - Ranges > 5 ppm within 1.5 % f.s. (full scale)
Analysis time	Approx. 3 minutes for TC or TIC
Injection volume	10-250 µl
Particle sizes	Maximum 450 µm (800 µm optional)
Furnace temperature	Up to 950°C
Alarms	Carrier-gas flow, furnace temperature, Peltier cooler temperature
Software and data processing	Area calculation. Multi-point linear regression, automatic exclusion of results, recalculation, statistics, table editing, automatic start-up and shutdown, 21 CFR Part 11 compliant

Physical Characteristics

Gas	CO_2 - free synthetic or zero grade air at 200 ml/min 150 kPa
Power requirements	100 – 120 V, 220 – 240 V, 60/50 Hz
Power consumption	Max 600 VA
Dimensions (hxdxw)	57 x 59 x 41 cm (excluding optional sampler)
Weight	40 kg (excluding optional sampler)

LAS-160 Sampler (optional)

Available Sample trays	150 sample positions of 15 ml + 10 standards positions
	90 sample positions of 20 ml EPA-VOA vials + 10 standards positions
	90 sample positions of 40 ml EPA-VOA vials + 10 standards positions
Sample homogenization	by contamination free top stirring device or by magnetic stirrer (optional)
Rinse procedures	Integrated sample needle and purge needle wash station which is continuously refreshed.
	Automatic acidification and purging for NPOC analysis. Acidification and purging of following sample while analyzing current one (optional)
Dimensions (hxdxw)	46 x 65 x 48 cm
Power requirements	100 – 120 V, 220 – 240 V, 60/50 Hz
Power consumption	100 VA
Weight	15 kg

SKALAR

Formacs^{TN}

Total Nitrogen Analyzer

General Characteristics

Analytes	Total Nitrogen (TN), Nitrate + Nitrite (NN) optional
Method	High temperature catalytic combustion with chemiluminescent detection (CLD)
Samples	Drinking-, ground-, waste-, sea-, cooling-, surface-, pharmaceutical waters, soil extracts, etc.
Sample introduction	By automated septumless rotary injection port with integrated wash position for sample line and injection needle
Compliancy	DIN-ENV 12260, ASTM D5176-91, ISO 11905-2, DIN 38409 H27

Operational and Performance Characteristics

Measuring range	Up to 300 mg/l TN - Up to 5 mg/l NN
Detection limit	0.03 mg/l TN - 0.03 mg/l NN
Reproducibility	< 1.5 % f.s. (full scale)
Analysis time	Approx. 3 minutes for TN or NN
Injection volume	10-250 µl
Particle sizes	Maximum 450 µm (800 µm optional)
Furnace temperature	Up to 950 °C
Alarms	Carrier-gas flow, furnace temperature, Peltier cooler temperature
Software and data processing	Area calculation. Multi-point linear regression, automatic exclusion of results, recalculation, statistics, table editing, automatic start-up and shutdown, 21 CFR Part 11 compliant

Physical Characteristics

Gas	CO_2-free synthetic or zero grade air at 200 ml/min (carrier gas)
	250 ml/min (detector supply gas) 150 kPa
Power requirements	100 – 120 V, 220 – 240 V, 60/50 Hz
Power consumption	Max 600 VA
Dimensions (hxdxw)	57 x 59 x 41 cm (excluding optional sampler)
Weight	40 kg (excluding optional sampler)

LAS-160 Sampler (optional)

Available Sample trays	150 sample positions of 15 ml + 10 standards positions
	90 sample positions of 20 ml EPA-VOA vials + 10 standards positions
	90 sample positions of 40 ml EPA-VOA vials + 10 standards positions
Sample homogenization	by contamination free top stirring device or by magnetic stirrer (optional)
Rinse procedures	Integrated sample needle and purge needle wash station which is continuously refreshed.
	Automatic acidification and purging for NPOC analysis. Acidification and purging of following sample while analyzing current one (optional)
Dimensions (hxdxw)	46 x 65 x 48 cm
Power requirements	100 – 120 V, 220 – 240 V, 60/50 Hz
Power consumption	100 VA
Weight	15 kg