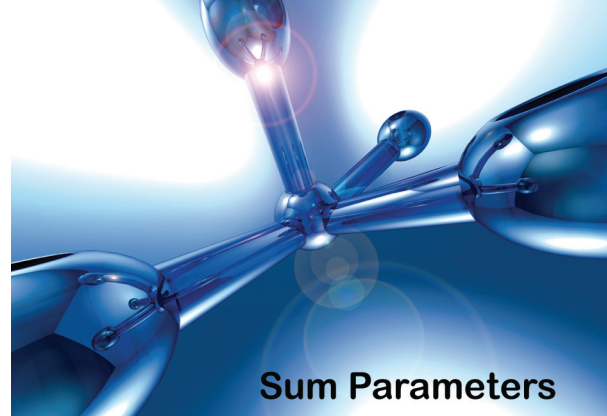


# Specification Sheet



## Accessories TOC-V Series ASI-V, OCT-1 TNM-1, SSM-5000A Online Module

### ASI-V

Vial types	9ml, 24 mL, 40 mL, 125 mL
Number of vials	9 mL vials x 93 24 mL vials x 93 40 mL vials x 68 125 mL vials x 24
Vial Septum	with dedicated septum (except 9mL vials)
Sample sparging	OK (If the external sparging kit is used)
Dimensions	approx. (W) 370 x (D) 540 x (H) 490 mm (excluding protrusions)
Weight	approx. 14 kg

### OCT-1

Vial types	Any sample container can be used
Number of vials	<input type="checkbox"/> 8 for a single OCT-1 <input type="checkbox"/> 16 with a second OCT-1
Sample sparging	Sparging is done in the syringe of TOC-V instrument
Dimensions	approx. (W) 245 x (D) 245 x (H) 440 mm (excluding protrusions)
Weight	approx. 3,5 kg

### TNM-1

Measured item	TN (Total nitrogen)
Measurement method	Combustion decomposition with chemiluminescence detection
Measurement range	0 to 4000 mg/L (with dilution function) (0 to 200mg/L for TOC-V E)
Measurement accuracy (reproducibility)	CV 3.0 %
Measuring time	Approx. 4 minutes
Dimensions	Approx. (W) 160 x (D) 235 x (H) 400 mm (excluding protrusions)
Weight	Approx. 8 kg

## SSM-5000A

Analyte	TC, IC, TOC (TC-IC)
Method	TC: Catalytically aided combustion oxidation at 900 °C IC: Pre-acidification, oven temperature: 200 °C
Measuring range	TC: 0.1 mg to 30 mg carbon (1-20µg carbon with high sense kit) IC: 0.1 mg to 20 mg carbon
Sample Amount	1 gram - aqueous content < 0.5 g
Repeatability	S.D. ± 1 % of full scale range.
Analysis Time	Approx. 5 to 6 minutes
Carrier Gas	99.9 % O <sub>2</sub> at 500 mL/min.
Ambient temperature requirements	5 ° to 35 °C
Power requirements	100-127 V or 220-240 V as ordered. 50/60 Hz
Weight	about 30 kg

## TOC-V CSH online

Measured items	NPOC (TOC measurement by IC removal using acid sparging), TC, IC, TOC (TC-IC), TN (optional TNM-1 required) (See note 1.)
Measurement method	680°C combustion catalytic oxidation/NDIR (non-dispersive infrared gas analysis) method 720°C combustion catalytic oxidation/ chemiluminescence method (when Optional TNM-1 is connected)
Measurement range	TC: Range variable between 0 to 500 µg/L and 0 to 25,000 mg/L IC: Range variable between 0 to 500 µg/L and 0 to 30,000 mg/L
Measurement cycle	Approx. 5 to 999 minutes (for NPOC measurement) (See note 2.)
Number of measurement channels	1 channel
Linearity	±2% F.S. max.
Zero stability (See note 3.)	±2% F.S. max. per day
Span stability (See note 3.)	±2% F.S. max. per day (ambient temperature does not vary more than 5°C)
Calibration cycle	Variable in the range 1 to 999 hours
Sample injection method	Automatic injection using syringe pump/slider
Sample injection volume	Variable in the range 10 to 2,000 µL
Sample dilution function	Diluted in syringe; dilution factor: 2 to 50
IC pretreatment	Automatic acidification and sparging

<b>Carrier gas</b>	High-purity air or oxygen (1 ppm max. of CO, CO <sub>2</sub> , or HC) High-purity nitrogen (1 ppm max. of CO, CO <sub>2</sub> , or HC) (when using optional nitrogen gas carrier kit) Supply pressure: Approx. 600 kPa Flowrate: 150 mL/min (230 mL/min with sparging)
<b>Measurement value output</b>	Analog output: Select from 4 to 20mA, 0 to 16mA (insulated, load resistance: 750Ω max.), and 0 to 1VDC RS-232C: Baud rate, 9,600 bps; Data length, 8 bits; Parity, none; Stop bits, 1
<b>Alarm output</b>	Measurement value upper limit and upper upper limit alarms, system error alarm: No-voltage contact output (maximum: 5VA, 0.1A, 50V)
<b>Control input</b>	Remote stopping and starting of sample measurement and automatic calibration
<b>Sample conditions</b>	Flowrate: Approx. 0.1 to 1 L/min Sample volume: 5 to 7 mL per measurement Temperature: 0°C to 90°C
<b>Ambient temperature</b>	5°C to 35°C
<b>Power supply</b>	AC 100V-127V ±10%, 220V-240V ±10%, 50/60Hz (normal power consumption: Approx. 230 VA)
<b>Dimensions</b>	Approx. 440 (W) x 560 (D) x 460 (H) mm (excluding protrusions)
<b>Weight</b>	Approx. 40 kg

**Note 1:** When using the nitrogen gas carrier kit, total nitrogen measurement with the TNM-1 is not possible.

**Note 2:** The minimum measurement cycle depends on the measurement conditions and the sample properties.

**Note 3:** If the ON-LINE TOC-VCSH update kit is added to an existing system, performance specifications related to zero stability and span stability are outside the scope of the guarantee.