

Carbon and Nitrogen Analyzers Specifications



Model	TRL-CN	TRL-TOC-S	TRL-TOC-L	TRL-SC	TRL-ROC
Measurement Method	High Temperature Catalytic Oxidation / Non-dispersive Infrared (NDIR) CO ₂ Detection / Chemiluminescence NO Detection				
Measured Parameters	Carbon, Nitrogen	TC, IC, TOC, TN	TC, IC, TOC, NPOC, POC, DOC, TN	Surface Carbon, Total Organic Carbon	TOC ₄₀₀ , ROC (EC), TIC ₉₀₀
Analysis Mode	Software controlled				
Sample types	Solid and Liquid	Solid and Liquid	Liquid	Sheet Metal	Solid
Measurement ranges	Carbon: 0-50,000 µg Nitrogen: 0 to 30,000 µg (optional)		Carbon: 0-15,000 µg	Carbon: 0-50,000 µg	Carbon: 0-50,000 µg
Detection Limits	Carbon: 1 µg Nitrogen: 1 µg		Carbon: 0.25 µg Nitrogen: 0.1 µg	Carbon: 1 µg	Carbon: 1 µg
Repeability	% 3.00 RSD max.				
Furnace Temperature	Separately adjustable dual furnace: Sample furnace between 450-1100 °C Catalyst furnace between 500-720 °C			Additionally with ramping program	Temperature ramping program, up to 900 °C
Sample cup, C/N liquid/solid analysis	Quartz or ceramic sample boats		-	Quartz or ceramic sample boats	
Sample cup, IC liquid/solid analysis	-	Standard 40 mL screw cap vial	-	-	-
Sample size	Up to 7 g of solid and 7 ml of liquid		-	Max. 100x25 mm metal sheet	Up to 7 g of solid
Sample injection	-		TC: 10 to 2,000 µl, IC: 10 to 5,000 µl	-	-
IC removal	-	Automated acidification and air sparging		-	-
Sample Dilution	-		Automated sample dilution with syringe pump	-	-
Carrier gas	High purity air (free from carbon content and humidity). Supply pressure: 6 barg				
Gas consumption	100 mL/min to 3,000 ml/min, operator adjustable based on the sample size and carbon content		100 mL/min to 300 ml/min, operator adjustable, based on injection volume	100 mL/min to 3,000 ml/min, operator adjustable based on the sample size and carbon content	
Operating temperature	5 to 45 °C				
Power	1500 VA, 100-240 V AC				
Dimensions	H48 x W82 x D56 cm (accessories not included)				

Accessories

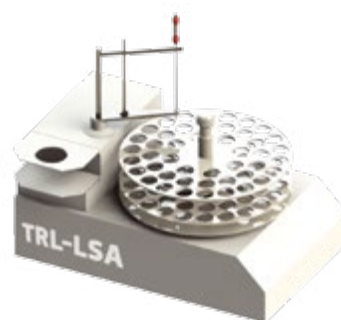
Solid Sample Autosampler

Model	TRL-SSA
Number of Sample Boats	21, 42 or 63 sample capacity
Power	500 VA, 100-240 V AC
Dimensions	HxWxD= 83 x 67 x 60 cm



Liquid Sample Autosampler

Model	TRL-LSA1
Number of Vials	46 sample capacity
Power	100 VA, 100-240 V AC
Dimensions	HxWxD= 42 x 44 x 39 cm



Model	TRL-LSA2
Number of Vials	21, 42 or 63 sample capacity
Power	450 VA, 100-240 V AC
Dimensions	HxWxD= 42 x 44 x 39 cm



Nitrogen Analyzer Unit

Model	TRL-TN
Measurement Method	High Temperature Catalytic Oxidation / Chemiluminescence detection (CLD)
Ozone Source	100 mL/min High purity oxygen or 500 mL/min air. Supply pressure: 2 barg
Power	500 VA, 100-240 V AC
Dimensions	HxWxD= 42 x 51 x 21 cm

