

Total Organic Carbon Analyzer



Features:

- * Auto sample dilution, auto acid-adding and auto gas purging(BK-TOC5000RD).
- * 680°C catalytic oxidation technology with platinum catalyst, especially for seawater test.
- * NDIR detector, high sensitivity and stability.
- * Optional autosampler.
- * Multi-functional PC software.
- * Precise gas flow control technology improves accuracy.
- * PID temperature controlling technology, ensure higher accuracy.
- * Unique three-stage dehydration technology improves drying efficiency.
- * Personalized standard curve management provides great convenience for users.
- * Consumables management reminds users to replace consumables in time.
- * Modular design, simplifying device operation and maintenance.
- * TOC-LAB software is optional, which complies with FDA-21 CFR Part11 requirements and USP.

Introduction:

Total Organic Carbon (TOC) analyzer is an instrument used for the accurate determination of the total amount of organic carbon in a sample. Its core principle involves converting the organic carbon in the sample into easily detectable carbon dioxide (CO₂), followed by quantitative analysis of CO₂ to infer the TOC content in the sample. Widely applied in various fields such as water quality monitoring, environmental governance, food and pharmaceuticals, and electronic semiconductors, this instrument is a key device for assessing the degree of organic pollution, purity, and quality control of samples.

Technical Parameters:

Model	BK-TOC5000RN	BK-TOC5000RD
Measurement Method	High Temperature Catalytic Combustion	
Detector	NDIR	
Analysis Parameter	TC, TIC, TOC, NPOC	
Control Mode	PC software controlled	
Gas Requirement	Oxygen, purity ≥99.995%	
Sample Type	Liquid sample (AS-W20 is optional.)	
Measurement Range	0~1000mg/L, can extend to 0~100,000mg/L (Manually dilution)	0~1000mg/L, can extend to 0~100,000mg/L (Automatically dilution)
Limit of Detection	TC: 50µg/L; IC: 20µg/L	
Measuring Time	TC: around 4min; IC: around 3min	
Max. Permissible Error	TOC: ± 5%; IC: ± 4%	
Repeatability	≤3%	
Injection Volume	TC: 100~500µl; IC: 100~2000µl	
Optional Accessories	Autosampler for liquid sample or solid sample, Enhanced Halogen Removal Device, Enhanced Halogen Removal Device-Metal Wire Mesh	
Power Supply	AC220V±10%, 50/60Hz(Standard); 110V±10%, 50/60Hz(Optional)	
Consumption	700W	
Package Size(W*D*H)	Main Machine: 780*710*610mm; Accessories: 710*230*600mm	
Gross Weight	Main Machine: 59kg; Accessories: 7kg	Main Machine: 63kg; Accessories: 8kg