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ADVANCE ANALYTIK KFT



EGETRA TOC 1000

Advance Analytik Egetra Series



EGETRA-TOC 1000

PRECISION CARBON ANALYSIS THROUGH CATALYTIC COMBUSTION TECHNOLOGY

Combustion Oxidation — Non-Dispersive Infrared Absorption Method. Carbon-containing inorganic matter in the sample undergoes acidification and aeration treatment before being introduced into a hightemperature combustion process (680°C) within an air stream free of carbon dioxide. An infrared detector then measures the resulting carbon dioxide content. Finally, the total organic carbon (TOC) is calculated based on the correlation between carbon content in CO₂ and TOC.

Key Note: Combustion takes place at 680°C to ensure complete oxidation of organic carbon species.

PRODUCT FEATURES

- *Multi-port valves with ceramic valve cores feature high wear resistance, strong acid resistance, organic solvent resistance, extended service life, and superior stability.*
- *Spiral glass tubes provide superior cooling efficiency for high-temperature gas inputs and enhanced energy utilization.*
- *Thermal insulation foam with low thermal conductivity effectively isolates temperature differentials between the condenser's interior and exterior, minimizing heat transfer and optimizing condensation performance.*
- *Precision thermistors and low-power condensing elements are ingeniously integrated with advanced PID algorithms to achieve highly accurate temperature control within the condenser.*
- *Features dynamic dilution capability, automatically adjusting dilution ratios based on the field-set measurement range.*
- *Includes automatic fault diagnosis and the ability to upload and record abnormal information, such as component failures, over-range alarms, exceedance alarms, and low-gas alarms.*
- *Upon abnormal reset or power restoration after an outage, the instrument automatically purges residual reactants and resumes initial operational status. Features a power-on alarm function, generating an alert message upon restart after a power interruption.*
- *Includes process logging for analytical instruments, measurement data recording, and alarm information storage. Data calculations are logged hourly, stored for over 3 years, and can be rapidly exported via USB drive.*
- *A 40L nitrogen cylinder provides approximately 15 days of operation in continuous measurement mode. When operating in gas-saving mode (1-hour measurement intervals), it lasts approximately 60 days.*
- *Requires no reagents, completely eliminating secondary pollution from waste liquids and wastewater.*

Basic Specifications

Measurement Range	0-50,000 mg/L, (available upto 100,000 mg/L)
Indicated Value Error	Within 5-100mg/L: 20%* $\leq$ $\pm$ 10%; 50%* $\leq$ $\pm$ 8%; 80%* $\leq$ $\pm$ 5%; >100mg/L: $\leq$ $\pm$ 5%
Lower Limit of Quantification	$\leq$ 5 mg/L (indicated value error $\pm$ 30%)
Repeatability	$\leq$ 5%
Low Concentration Drift	Within 5-100mg/L: $\leq$ 1mg/L
High Concentration Drift	$\leq$ 5%
Resolution	0.1mg/L
Display	7-inch touchscreen
Measurement Mode	Continuous mode, cyclic mode, fixed-point mode, controlled mode, manual mode available
Measurement Cycle	$\leq$ 12 minute (Can be optimised upto 5 minutes)
Calibration Mode	Manual calibration and automatic calibration modes
Maintenance Cycle	Generally once a month
Power Supply	220V $\pm$ 22V , 50Hz or DC24V
Output	4-20mA
Communication Method	MODBUS RS-485
Combustion Temperature	680°C
Environmental Conditions	Temperature-controlled indoor environment, recommended temperature range: +5 to 40°C; humidity $\leq$ 85% (non-condensing)

APPLICATIONS



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Water Treatment Plants
For monitoring water quality in treatment processes and ensuring compliance with regulatory standards.



Environmental Monitoring
For assessing water quality in natural ecosystems, identifying pollution sources, and protecting aquatic biodiversity.



Aquaculture Farms
To maintain optimal conditions for aquatic life, allowing for healthy growth and production.



Industrial Process Control
For quality control in industrial processes that involve water usage.



Wastewater Treatment
To monitor and optimize the efficiency of wastewater treatment processes.



Note -

This data sheet serves as general information about the Egetra TOC 1000. For specific technical details, installation guidelines, and troubleshooting assistance, please refer to the official user manual provided with the product. Due to continuous product improvement, specifications and design are subject to change without notice. Actual product may differ slightly from illustrations.

For inquiries and detailed technical information, please contact sales@advanceanalytik.com.



We, Advance Analytik KFT, are a distinguished manufacturing company based in Budapest, Hungary. Our company's long-standing presence in this vibrant city reflects our unwavering commitment to excellence, innovation, and adaptability in a competitive industry.

At Advance Analytik, we specialize in precision and performance, offering a wide array of advanced analytical instruments. Our product range includes state-of-the-art analog and digital sensors, cutting-edge controllers, and modular analyzers designed for diverse applications. Each product is a testament to our meticulous attention to detail and dedication to exceeding industry standards.

The backbone of our success lies in our exceptional team of professionals. Comprised of skilled engineers, innovative designers, and dedicated support staff, our team works in synergy to deliver solutions that empower our clients.



Research & Development Facility
(Edeleny, Hungary)

OUR MISSION

To be the preferred partner for industries worldwide, offering entire and reliable analytical solutions that drive innovation and ensure quality

OUR VISION

To revolutionize analytical science by pioneering state-of-the-art instruments and services, empowering researchers and businesses to achieve new unprecedented accuracy

Why Choose Advance Analytik?

Cutting-edge Technology

We leverage the latest advancements in analytical instrumentation and software to provide our customers with state-of-the-art solutions that deliver accurate and precise results.

Customized Solutions

We understand that every industry and research field has unique requirements. That's why we offer customized solutions tailored to your specific needs.

Reliable Performance

We take pride in delivering instruments and solutions that consistently deliver reliable performance.

Exceptional Support and Service

Our dedicated team is committed to providing comprehensive support throughout your analytical journey.

Trusted Expertise

With years of experience in the analytical instrumentation industry, we have developed a deep understanding of our customers' needs and challenges.



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