Model 6700E

Total Organic Carbon Analyzer

- Auto-Clean, Auto-Calibration, Auto-Validation functions
- Digital flow controller for carrier gas
- 2 x 4-20 mA output
- Integral data-logger with USB port
- Color touchscreen

Online monitoring of total organic carbon (TOC) is essential for regulatory and process control purposes among water treatment, wastewater and industrial users. The 6700E series employs proven UV-Persulfate methodology to isolate only organic carbons, oxidize them into carbon dioxide and measure TOC in the gas phase using infrared absorption technology. This method conforms to EPA, DIN, CE, ASTM and NAMUR regulations as well as meets the requirements of ISO and EN directives.

Analysis Process

To first remove the inorganic carbon, the sample is acidified which oxidizes the inorganics into CO_2, which are then sparged. With only organic carbon remaining, the sample is introduced with a persulfate solution and radiated with ultraviolet (UV) light to oxidize the organic carbon to CO_2. The TOC measurement can then be made as CO_2 using an integral NDIR analyzer.

Display

The color touchscreen gives the user the latest TOC reading, recent trend data, fluid status, carrier flow and the alarm status on the main screen.

Available Accessories

Fast Loop Reservoir
Maintains a constant sample flow and switches analyzer to stand-by in case of insufficient flow. As soon as the sample flow restarts, the measurement is resumed.

External Diluters
Options of 2x to 40x dilution of one or two sample streams using 1 motor with dual pump heads or 2 motors with a single pump head.

Filtration Unit
Self-cleaning, at user selectable intervals and cleaning period.

Fast Loop Reservoir

The fast loop reservoir has a floating level sensor that is at atmospheric pressure. This allows for a constant delivery of the sample without over-pressure. It also allows fast circulation of the sample from the sampling point or optional filtration unit.

Features

- TOC or TC measurement, calculated COD available
- Ranges from 0-5 to 0-20,000 mg/L
- Dual-compartment IP-65 powder-coated steel enclosure
- Digital flow controller provides flow verification and alarms if flow stops
- Integral compressor option eliminates carrier gas requirement
- 7-inch color touchscreen display
- 2 x 4-20 mA outputs, 2 x Form-A relay contacts
- Integral data-logger with USB port for download

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Analyte	TOC or TC calculated COD available	
Conformity	EN 310004-2, EN 610004-4, C 46-022, EN 61326 (electromagnetic compatibility)	
Range	0-5 to 20,000 mg/L, single or dual range with external dilutor (0-5 to 0-1,000 ppm undiluted range, > 1,000ppm diluted range)	
Accuracy	± 2% FS nondiluted, ± 4% FS diluted	
Response Time	From 5 minutes (depending on range)	
Environmental	Ambient: Humidity:	41° to 113°F (5° to 45°C) 0-80%
Utilities	Carrier gas free operation (self generated) or optional external carrier gas port for TOC range < 5 ppm Phosphoric Acid (for TOC only) ~10 liters per month Sodium Persulfate ~10 liters per month	
Display	7-inch touchscreen color LCD	
Outputs	Analog: Discrete: Communications: Data-logger:	2 x 4-20 mA (isolated) Discrete: 2 x Form-A relay contacts (fault alarm & programmable alarm) RS485 MODBUS-RTU (standard), optional Ethernet USB to download file
Pressure	Inlet: Outlet:	Atmospheric (fast loop reservoir is required for positive pressure sample line) Atmospheric
Power	115-230 VAC, 50/60 Hz Max Power Consumption:	 350VA for 115VAC or 250 VA for 230VAC
Fuse	4A (115V) or 3.15A (230V)	
Sample Flow Rate	100-500 ml/min (via fast loop reservoir)	
Mounting	Wall mount or support rack	
Cabinet Rating & Material	IP54 / NEMA 3 Cold rolled epoxy coated steel	
Dimensions	29.9"H x 23.6"W x 8.3"D (76 x 60 x 21 cm) 81.57 lbs (37 kg) (approx. depending on range)	

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ISO 9001:2015 CERTIFICATION
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