

MODEL U1600-O

ONLINE TOC ANALYZER

Continuous High-Purity Water TOC Monitoring for Pharmaceutical, Ultrapure Water, and Utility Applications

The Blue Dragon Model U1600-O is a wall-mounted online total organic carbon (TOC) analyzer that uses UV oxidation and differential conductivity detection to deliver continuous or routine monitoring of high-purity water. Designed for PW, WFI, pharmaceutical utility water, electronic ultrapure water, and other approved low-conductivity water systems, the U1600-O ensures reliable, compliant TOC data with advanced user security and data integrity functions.



WHY CHOOSE THE MODEL U1600-O



Online TOC Monitoring
Continuous or routine monitoring at validated sample points.



UV Oxidation + Conductivity
Reagent-free UV oxidation with differential conductivity detection.



1-1600 ppb Range
Broad working range for high-purity water applications.



1 ppb Detection Limit
Sensitive low-level TOC monitoring.



≤3% Repeatability
Stable analytical Performance.



Data Integrity Functions
Multi-level access, audit trail, and electronic signatures.

APPLICATIONS



Purified Water & WFI
Monitor PW and WFI for product quality and process assurance.



Pharmaceutical Utilities
Ensure utility-water quality across pharma operations.



Electronic Ultrapure Water
Protect critical processes with low-level TOC monitoring.



Deionized Water Systems
Monitor DI water for consistent purity and compliance.

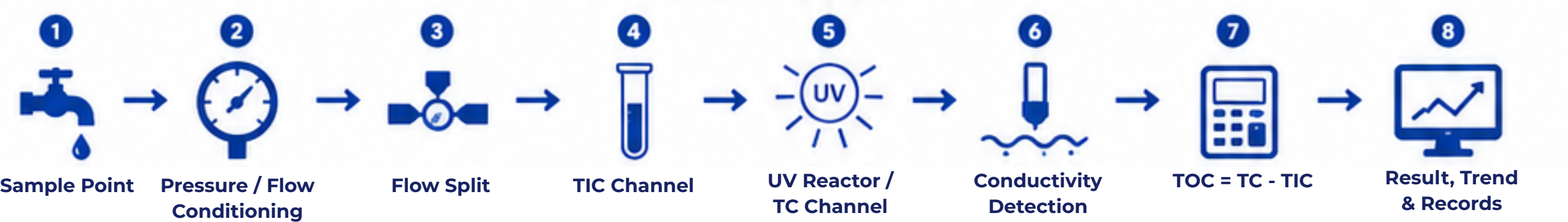


Quality Control & Validation
Support QC programs and method validation.



Trend Monitoring at Sample Points
Track TOC trends for early detection and process control.

HOW IT WORKS



TECHNICAL SPECIFICATIONS

Measurement Principle	UV oxidation + direct/differential conductivity detection
Measurement Range	1-1600 µg/L carbon (1-1600 ppb)
Detection Limit	1 µg/L (1 ppb)
Display Resolution	0.1 µg/L (0.1 ppb)
Accuracy	±3%
Repeatability	≤3%
Analysis Time	Approximately 3 minutes per test
Conductivity Range	0-8.1 µS/cm
Sample Temperature	1-50 °C standard; optional condenser for hotter service
Minimum Inlet Pressure	0.3 MPa upstream of flow control
Instrument Sample Flow	6-10 mL/min
Process Connection	50.5 mm sanitary clamp adapter to 3 mm sample inlet tube
Internal Wetted Tubing	304 stainless steel
Storage	32 GB; more than 1,000,000 records
Interfaces	RS232, RS485, USB and Ethernet
Display	7-inch colour touchscreen
Power	220 VAC ±10%; ≤120 W
Dimensions	360 × 206 × 250 mm
Weight	Approximately 5.8 kg



BUILT FOR
HIGH PURITY WATER ANALYSIS

- ✓ Online low-level TOC monitoring
- ✓ Designed for PW, WFI and UPW systems
- ✓ Clear touchscreen interface and trending
- ✓ Strong compliance-support features
- ✓ Suitable for validated utility-water programs