Thermo Scientific Orion AQUAfast® IV Advanced Turbidity Meter



The AQ4500 turbidimeter has dual source LED that allows readings that comply with both EPA 180.1 and ISO 7027 methodologies.

- Nephelometric and ratiometric measurements with autoranging
- Data log capacity of up to 100 data points
- Readings in the range of 0 to 1000 NTU with choice of units: NTU, FTU, FNU, ASBC or EBC
- Includes turbidity standards kit, rugged carrying case, and replacement cuvettes
- The AQ4500 is truly IP67 waterproof to a depth of 3 meters

$\Delta \cap$	4500) Kit

The AQ4500 offers ratiometric range, which will give EPA GLI method 2 equivalent numbers.

Specifications	Description	
Light Source	White LED, IR LED	
Temperature Effect	LED temperature compensated	
Includes Measurement Modes	EPA 180.1, ISO Nephelometric, ISO Absorbance, IR Ratiometric, % Transmittance, EPA GLI Method 2, EBC (European Brewing Chemists), ASBC (American Society of Brewing Chemists)	
Measurement Ranges	0 to 4000 NTU, EPA 0 to 2000 NTU, GLI range 0 to 40 NTU, ISO-7027 0 to 150 FAU, IR Ratio 0 to 4000 NTU, EBC 0 to 24.5, ASBC 0 to 236	
Resolution	0.01 (0 to 9.99 NTU), 0.1 (10 to 99.9), 1 (100 to 1000)	
Precision	+/- 2% of reading plus 0.01 NTU from 0 to 500 NTU, +/- 3% of reading from 500 to 100 NTU, +/- 5% of reading from 1000 to 2000 NTU	
Calibration Standards	Provided primary SDVB standards	
Sample Size Minimum	10 mL	
User Interface	Automatic sample measurement for each measurement with simple user interface	
RS232	Bidirectional	
Datalog	100 points	
Real Time Clock	Yes	
Power	Long life - low power consumption - about 2500 hours with 4 alkaline AA batteries or about 10000 with lithium batteries	
Waterproof Rating	IP67	
Warranty	2 years	
Regulatory and Safety	CE, FCC part 15	
Operating Temperatures	(-40 $^\circ\text{C}$ to 60 $^\circ\text{C}),$ 90% relative humidity at 30.0 $^\circ\text{C}$ max	

Ordering Information

Cat. No.	Description
AQ4500	AQUAfast IV Turbidimeter and calibration kit Kit includes meter, 4 primary standards, standard and sample vials, silicone oil and cloth in carrying case
AQ4CBL	RS232 cable for data download and software updates
AC45FZ	Formazin turbidity standard, 4000 NTU, 475 mL
AC45SI	Silicon oil and cloth kit for AQ4500
AC45ST	Primary turbidity calibration kit
AC2T24	24 mm replacement turbidity vials, 12 pack

Thermo Scientific Orion AQUAfast® AQ3010 Turbidity Meter

- Ergonomic IP67 turbidity meter for lab or field use
- Uses Nephelometric principle with 90° detection
- In many locations a separate light cap or shield is not needed
- Meets ISO 7027 and offers consistent light source for greater accuracy
- Easy vial indexing with continuous measurement mode
- No mixing or diluting with polymer bead primary standards for faster calibration
- Three year warranty

Specifications	Description
Display	LCD
Keys	Power, Cal, Scroll Up, Scroll Down, Read/Enter
Automatic Range Selections and Resolution	0.01 to 19.99 NTU with 0.01 NTU resolution
	20.0 to 99.9 NTU with 0.1 NTU resolution
	100-1000 NTU with 1 NTU resolution
Precision	+/- 2% of reading +/- 1 LSD for 0-500 NTU
	+/- 3% of reading +/- 1 LSD for 501-1000 NTU
Response Time	< 6 seconds
Sample Requirement	10 mL
Included Calibration Standards	0.02, 20.0, 100, and 800 NTU
Sample Vials	25 mm diameter with indexing mark
Light Source	IR LED for ISO 7027 Turbidity measurement
Power	4 x AAA > 3000 tests (4 x AAA Lithium > 12000 tests)
Battery conservation feature	Auto shutoff after 20 minutes of inactivity
Ambient Operating Temperature	0 to 50 C (0 to 90% Non-Condensing Relative Humidity at 30 C)
Self Diagnostics	Yes, with troubleshooting error codes
Waterproof rating	IP67
Regulatory Approvals	CE, TUV 3-in-1 for CSA-US, FCC part 15
Warranty	3 year

The new AQUAfast AQ3010 Turbidity Meter makes it easy to determine the clarity of your sample with one keystroke and without an extra light shield cap in many environments. With autoranging from 0 – 1000 NTUs, this small waterproof portable meter is very easy to use, plus features a large easy-to-read LCD display. The meter is supplied with ready-to-use, highly stable EPA-approved polymer bead primary standards. Calibration is easy with step-by-step prompts with the option to choose which points to calibrate. The standards can be used for a calibration check at any time, verifying that your readings are accurate.

The AQUAfast AQ3010 meter comes with everything you need in a field case for easy storage and transport. This meter is covered by a 3 year warranty!



AQ3010 Meter Kit

Ordering Information

Cat. No.	Description	Contents
AQ3010	AQUAfast turbidity meter kit	Meter, set of EPA-approved polymer-based primary turbidity standards, batteries, light shield cover, seven vials, lint-free cloth, silicone oil, MSDS and user guide
AC301S	Replacement set of EPA- approved polymer-based primary turbidity standards	60 mL bottle of 0.02, 20.0, 100, and 800 NTU
AC3SIL	Replacement silicone oil and cloth	1 bottle of silicone oil and one cloth
AC3V25	Replacement 25 mm vials, pack of 3	3 empty 25 mm vials with caps
AC3CBR	Replacement vial cleaning brush	Brush, package of 10

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