

Turbidity meter AL250T-IR

with infra-red light source (EN ISO 7027)



The compact AQUALYTIC® infrared turbidity meter AL250T-IR is designed to allow fast, precise on-site testing. The unit measures the scattered light at an angle of 90°, as stipulated in EN ISO 7027.

The wide measuring range from 0.01-1100 TE/F = NTU = FNU makes the instrument suitable for various applications, ranging from drinking water to waste water.

As infrared light is used for measurement purposes, the unit can be used to test both coloured and colourless liquids.

The standards required for calibration of the unit are also supplied. A second adjustment mode allows alternative adjustment with user-defined turbidity standards.

Accessories

Article	Code
Turbidity standard set T-CAL (< 0.1, 20, 200, 800 NTU)	4194150
Set empty vials, 24 mm ø (12 pc.)	197655
Cleaning cloth for vials	197635
Sample chamber lid	19801100
Battery, 9 V	1950012
Formazin Stock Solution (4000 NTU), 100 ml	194141
Formazin Stock Solution (4000 NTU), 250 ml	194142

Highlights

- Range from 0.01 - 1100 NTU
- Measurement with infrared light at an angle of 90°
- Measurement of coloured liquids
- Easy handling
- 600 tests without battery change

Technical data

Measurement cycle	approx. 8 seconds
Display	backlit LCD (on keypress)
Optics	temperature-compensated LED and photosensor amplifier in water proof sample chamber, infrared light
Keypad	polycarbonate membrane, splash proof
Power supply	9 V power pack battery
Auto - OFF	automatic switch-off
Storage	internal ring memory for 16 data sets
Additional feature	real time clock and date
Range	0,01 - 1100 NTU (Auto-range)
Resolution	0.01 - 9.99 NTU = 0.01 NTU 10.0 - 99.9 NTU = 0.1 NTU 100 - 1100 NTU = 1 NTU
Accuracy	± 2,5 % of reading or ± 0.01 NTU (0 - 500 NTU) ± 5 % (500 - 1100 NTU)
Housing	ABS
Dimensions (L x W x H)	190 x 110 x 55 mm
Weight	approx. 0.4 kg (base unit)
Ambient conditions	Temperature: 5 – 40 °C rel. humidity: 30–90%
CE-Conformity	



Delivery Content

AL250T-IR turbidity meter as described above, complete with 4 turbidity standards < 0.1, 20, 200 and 800 NTU, battery, vials, guarantee sheet, certificate of compliance, instruction manual in case.

Order code: 4266020

Turbidity meter AL400T-WL

with white light source (US EPA 180.1)



Technical data

Display	large LCD display
Keypad	5 key polycarbonate membrane, splash proof
Power supply	4 AA Alkaline batteries for approx. 20 h continuous operation or 3500 tests
Range	0.01 to 1100 NTU
Accuracy	± 2% of reading or 0.01 NTU (0-500 NTU) ± 3% of reading (500-1100 NTU)
Resolution	0.01 NTU to 99.99 NTU 0.1 NTU from 100.0 to 999.9 NTU 1.0 NTU from 1000 to 1100 NTU
Housing	ABS
Dimensions	210 x 95 x 45 mm
Weight	approx. 0,45 kg (base unit)
Ambient conditions	Temperature: 0 – 50 °C rel. humidity: 0 – 90%
CE-Conformity	

Highlights

- Ideal for regulatory monitoring, process control or field use
- Simple operation
- Easy calibration
- Auto-Ranging
- Meets USEPA

The AL400T-WL allows easy turbidity measurement in either the field or in the laboratory. Using a „white light“ source and 90° detection, the AL400T-WL meets the specifications for EPA turbidity measurement (EPA Standard 180.1).

A power efficient micro-circuit design allows the instrument to yield 5000 tests on 4-AA alkaline batteries with an estimated 7-10 year bulb life. Integrated diagnostics confirm proper operation and accuracy.

The instrument features an Auto-Ranging feature that automatically selects the correct turbidity range for your sample. Calibration is simple with the included calibration standards.

Delivery content

The AL400T-WL comes ready to use in a sturdy handy case with following accessories:

2 sample vials, 3 turbidity standards, 4 batteries, instruction manual and guarantee sheet

Order code: 4194200

Accessories

Set of secondary standards 0.02, 10, 1000 NTU

Order code: 194280

Set of 3 sample vials with black lid

Order code: 194290



Turbidity meter AL450T-IR

with infra-red light source (EN ISO 7027)



70

Highlights

- Meets EN ISO 7027
- Automatic overall range adjustment with Standard-Set T-Cal
- Auto-ranging
- High accuracy
- Laboratory and mobile use
- RS 232 interface
- Storage for up to 1000 data-sets
- Real-time clock
- Waterproof sample chamber and housing

Turbidity is measured according to EN ISO 7027 by nephelometric means (90° scattered light). The infra-red light-source permits measurement of coloured and colour-free samples.

The automatic measurement range detection facility (Aurorange) enables direct turbidity measurement from 0.01 to 1100 NTU with an accuracy of $\pm 2\%$ up to 500 NTU and $\pm 3\%$ thereafter.

A large graphic display, a choice of several different languages and user-friendly operating instructions make the device extremely easy to use.

Software updates (for example: languages) can be downloaded free of charge from our website www.aqualytic.de

Technical data

Principle	nephelometric (90° scattered light)
Light source	IR-LED (860 nm)
Keypad	conditional acid and solvent resistant; membrane switch keypad with audible feedback
Auto – Off	automatic switch off approx. 20 minutes after last key press
Display	Graphic-Display
Update	Software update via Internet
Clock	real time clock
Memory capacity	1000 data sets with date, time and registration number
Sample volume	approx. 12 ml
Range	0.01 – 1100 NTU (Auto range)
Resolution (NTU)	0.01 from 0.01 - 9.99 0.1 NTU from 10.0 - 99.9 1 NTU from 100 - 1100
Accuracy (NTU)	± 2 % of reading or 0.01 (0 - 500) ± 5 % of reading (500 - 1100)
Ambient conditions	temperature: 5-40°C at 30-90% relative humidity (non condensing)
Interface	RS232 for printer and PC-connection; 9-pin D-sub-mail connector; data format ASCII
Power supply	7 NiCd rechargeable batteries (Type AA/Mignon with 1100mAh); wall plug mains adapter (Input: 100-230V, 50-60Hz; Output: 15V;530mA) and Lithium battery (CR 2032, 3V) for data storage and real time clock.
Weight (instrument)	approx. 1000 g including batteries and power pack
Dimensions (L x W x H)	approx. 265 x 195 x 70 mm
Specification	meets ISO 7027

CE-Conformity

Delivery Content

The AL450T-IR is supplied complete and ready-to-use incl. 1 Set Turbidity Standards T-CAL, 7 rechargeable batteries, mains charger, 100-240 V, PC connection cable, 4 x 24 mm vials, instruction manual and warranty sheet in a plastic carrying case with water resistance foam.

Order code: 4194000

Accessories

Set of 12 sample vials with black lid, height 55 mm, ø 24 mm	197655
Cleaning cloth for vials	197635
Rubber seal cap, black for interface and power plug-in	19801716
Sample chamber lid, black	19801119
Mains charger, 100 - 240 V, 50 - 60 Hz, with international adapters	193010
Universal adapter for sockets, international	192065
Connection cable connection to PC, serial 9-pins	198198
Akku AA Mignon, 1100 mAh (7 pc.)	1950020
Lithium battery	1950017
Formazin Stock Solution (4000 NTU), 100 ml	1941 41
Formazin Stock Solution (4000 NTU), 250 ml	194142
Set Turbidity Standards T-CAL (< 0.1, 20, 200, 800 NTU)	4194150
Paper printer DPN 2335	198075
Roll of paper for printer DPN 2335	198062
Pack of accus for printer DPN 2335	198066
Ribbon cartridge for printer DPN 2335	198067

