# **Section 1 Specifications**

Specifications are subject to change without notice.

Specification	Details
Measurement method	Nephelometric
Regulatory	Meets ISO 7027, DIN EN 27027 and DIN 38404
	ASTM D7315 - Standard Test Method for Determination of Turbidity Above 1 Turbidity Unit (TU) in Static Mode
	ASTM D6855 - Standard Test Method for Determination of Turbidity Below 5 NTU in Static Mode
Dimensions (W x D x H)	39.5 x 30.5 x 15.3 cm (15.6 x 12.0 x 6.02 in.)
Weight	2.9 kg (6.4 lb)
Enclosure	IP30; indoor use only
Protection Class	External power supply: Protection Class I; instrument: Protection Class II
Pollution degree	2
Installation category	External power supply: Category II; instrument: Category I
Power requirements	Instrument: 12 VDC, 3.4 A; power supply: 100–240 VAC, 50/60 Hz
Operating temperature	0 to 40 °C (32 to 104 °F)
Storage temperature	–20 to 60 °C (–4 to 140 °F)
Humidity	5 to 95% relative humidity, non-condensing
Display	17.8 mm (7 in.) color touch screen
Light source	Light-emitting diode (LED) at 860 ± 30 nm
Measurement units	FNU and NTU
Range	NTU/FNU: 0–1000
Accuracy <sup>1, 2, 3</sup>	±2% of reading plus 0.01 FNU/NTU from 0–1000 FNU/NTU
Resolution	Turbidity: 0.001 FNU/NTU (on lowest range)
Repeatability	±1% of reading or 0.01 FNU/NTU, whichever is greater (under reference conditions)
Response time	Signal averaging off: 6.8 seconds
	Signal averaging on: 14 seconds (when 10 measurements are used to calculate the average)
Stabilization time	Immediately
Reading modes	Single, continuous, Rapidly Settling Turbidity™, signal averaging on or off
Communication	USB

<sup>&</sup>lt;sup>1</sup> Turbidity specifications identified using recently prepared formazin standard and matched 1-inch sample cells.

<sup>&</sup>lt;sup>2</sup> Intermittent electromagnetic radiation of 3 volts/meter or greater may cause slight accuracy

 $<sup>^3~</sup>$  Reference conditions: 23 (± 2) °C, 50 (± 10)% RH noncondensing, 100–240 VAC, 50/60 Hz

Specification	Details
Interface	2 USB-A ports for USB flash drive, Seiko DPU-S445 printer, keyboard and barcode scanner
Datalog	Maximum 2000 total logs, includes reading log, verification log and calibration log
Air purge	Dry nitrogen or instrument grade air (ANSI MC 11.1, 1975) 0.1 scfm at 69 kPa (10 psig); 138 kPa (20 psig) maximum Hose barb connection for <sup>1</sup> / <sub>8</sub> -inch tubing
Sample cells	Round cells 95 x 25 mm (3.74 x 1 in.) borosilicate glass with rubber-lined screw caps
Sample requirements	25 mm sample cell: 20 mL minimum 0 to 70 °C (32 to 158 °F)
Certification	CE, KC, RCM
Warranty	1 year (EU: 2 years)

## Section 2 General information

In no event will the manufacturer be liable for direct, indirect, special, incidental or consequential damages resulting from any defect or omission in this manual. The manufacturer reserves the right to make changes in this manual and the products it describes at any time, without notice or obligation. Revised editions are found on the manufacturer's website.

## 2.1 Safety information

The manufacturer is not responsible for any damages due to misapplication or misuse of this product including, without limitation, direct, incidental and consequential damages, and disclaims such damages to the full extent permitted under applicable law. The user is soley responsible to identify critical application risks and install appropriate mechanisms to protect processes during a possible equipment malfunction.

Please read this entire manual before unpacking, setting up or operating this equipment. Pay attention to all danger and caution statements. Failure to do so could result in serious injury to the operator or damage to the equipment.

Make sure that the protection provided by this equipment is not impaired. Do not use or install this equipment in any manner other than that specified in this manual.

## 2.1.1 Use of hazard information

## **A DANGER**

Indicates a potentially or imminently hazardous situation which, if not avoided, will result in death or serious injury.

### **AWARNING**

Indicates a potentially or imminently hazardous situation which, if not avoided, could result in death or serious injury.

#### **ACAUTION**

Indicates a potentially hazardous situation that may result in minor or moderate injury.

### NOTICE

Indicates a situation which, if not avoided, may cause damage to the instrument. Information that requires special emphasis.