

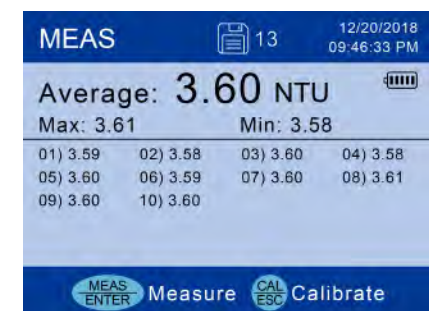
## Solution for low-turbidity accuracy

(Applicable for TN500 and TN480)

### Solution 1 – TruRead™ Measurement Mode

Water turbidity is a complex analytical measurement. The accuracy will be affected by many factors such as precipitation, suspension, air bubbles, stray light, instrument errors, operating techniques, cuvette contamination, and cuvette optical errors.

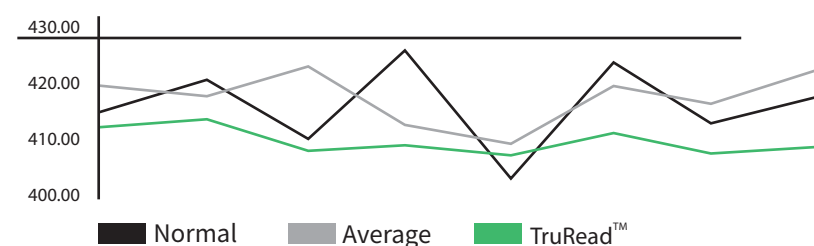
*TruRead™ mode significantly reduces the above measurement errors.*



- According to different sample solutions, choose 5/10/15/20 times for continuous measurement and read the average value.
- The max and min values help you determine the reliability of measurement, whether the sample solution is sufficiently mixed, settled, or degassed.
- Display or save the complete measurement interface, including MAX, MIN, average, and all measurement values.

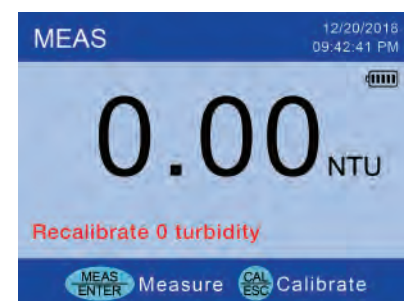
\* TruRead™ Mode (10 times)

### Comparison of three measurement modes



### Solution 2 – 0 NTU Error Reminder

If the zero point is calibrated with contaminated 0.0 NTU standard solution, the measurement will have a negative error. The instrument can automatically recognize the negative error at the zero point and remind users to re-calibrate, as shown in the right figure. If the reminder appears again after calibration, it means that the 0.0 NTU standard solution maybe invalid and should be replaced.



\*0 NTU error reminder

# Portable Turbidimeter

## Compliant with EPA 180.1 Method



Place the sample vial



Replaceable light source



TN500 Premium

- Replaceable tungsten filament lamp
- Ideal for high-accuracy low-turbidity measurement
- Range: 0 – 1000 NTU, auto. ranging



GLP data management & USB data export



Rechargeable lithium battery

a	b
c	d

- Measurement mode
- Calibration mode
- Calibration setup
- Settings



TN420 Basic

## Extraordinary reliability and convenience

### Range: 0 – 1000 NTU

Achieve lab-grade accuracy wherever you are, suitable for tap water, drinking water, swimming pools, beverage making, environmental monitoring, etc.

### Customized AMCO® Polymer Standard Calibration Solutions

Approved by U.S EPA and ASTM, AMCO® high-molecular polymer turbidity standard solutions are the best alternatives to Formazin standards in terms of shelf-life, ease of use, and safety concerns.

	Formazin solutions	AMCO® polymer solutions
<b>Toxicity</b>	Highly toxic, PPE is necessary when handling	Non-toxic
<b>Operation</b>	Requires diluting, complicated operation.	No diluting needed, use directly
<b>Shelf life</b>	<2 NTU: 1 hour; 2 – 20 NTU: 12 – 24 hours; 20 – 400 NTU: 1 month	1 year
<b>Storage condition</b>	Avoid sunlight at low temperature	Avoid sunlight at room temp.
<b>Convenience</b>	Easy to settle, requires flipping and mixing	Very stable, can be used directly
<b>Traceability</b>	Non-traceable	NIST traceable



\*AMCO® Standard Solution Set



\*Sample cuvettes (6 units come with the kit)

# Portable Turbidimeters

## Compliant with ISO 7027 Method

- Infrared LED light source, compliant with ISO7027 and DIN EN 27027 Method
- Ideal for colored sample solutions such as wine and beer
- Range: 0 – 1000 NTU, auto. ranging
- TruRead™ mode (TN480 only) compensates errors by particles in solutions



TN480 Premium

TN400 Basic



\*Complete Kit

Model	Name	Description	Memo
TN500	Portable turbidimeter kit	Refer to technical specs	EPA • Premium
TN420			EPA • Basic
TN480			ISO • Premium
TN400			ISO • Basic
T500-2	0 NTU standard	0.0NTU/100mL	applicable for all
T500-1	Standards kit	20/100/400/800NTU	TN500/TN420
T200-1	Standards kit	20/100/400/800NTU	TN480/TN400
T500-3	Sample cuvettes	Φ25x60 mm, 6 units	applicable for all
TN500-5	Replacement lamp	/	TN500/TN420
TN500-4	Lithium battery	3.7V rechargeable	TN500/TN420
TN400-S3	Silicone oil	10mL	applicable for all

	TN500 Premium	TN420 Basic	TN480 Premium	TN400 Basic
Light Source	Tungsten filament lamp, 400-600 nm		Infrared LED, 860±30 nm	
Regulatory	U.S EPA 180.1 Method		ISO7027 and DIN EN 27027 Method	
Certification	CE, RoHS			
Range	0 – 1000 NTU (FNU), auto. ranging			
Resolution	0.01 NTU (0 – 19.99) / 0.1 NTU (20.0 – 99.9) / 1 NTU (100 – 1000)			
Accuracy	± 2% of reading plus stray light			
Repeatability	±1% of reading or 0.02 NTU, whichever is greater			
Calibration Standards	T500-1 AMCO solution kit / Formazin standard solution 0/20/100/400/800 NTU		T200-1 AMCO solution kit / Formazin standard solution 0/20/100/400/800 NTU	
Detector	Silicon photovoltaic			
Measurement Mode	Normal (push to read), TruRead™	Normal (push to read), Average	Normal (push to read), TruRead™	Normal (push to read), Average
0 NTU error reminder	Yes	N/A	Yes	N/A
Data storage	200 sets	N/A	200 sets	N/A
Data export	USB to PC	N/A	USB to PC	N/A
Calibration record	Date and time	N/A	Date and time	N/A
System language	English/Spanish/Chinese	English	English/Spanish/Chinese	English
Screen	TFT Color Screen			
Sample cuvette	Φ25×60 mm, 18 mL, high borosilicate glass with lid			
Power supply	3.7V rechargeable lithium battery		AA Alkaline battery *4	
Working condition	Temperature: 0 – 50°C; Humidity: 0 – 90%			
Storage condition	Instrument: -40 – 60°C; Calibration solutions: 5 – 30°C			
Enclosure rating	IP67			
Warranty	2 years			
Dimension & Weight	Instrument: (90x203x80)mm / 385g; Kit: (310x295x110)mm / 1.5 kg			
Includes	Meter, calibration solution*5, sample cuvette*6, microfiber cloth, silicone oil, software flash-drive, USB cable, power adapter, manual, carrying case	Meter, calibration solution*5, sample cuvette*6, microfiber cloth, silicone oil, power adapter, charging cable, manual, carrying case	Meter, calibration solution*5, sample cuvette*6, microfiber cloth, silicone oil, software flash-drive, USB cable, manual, carrying case	Meter, calibration solution*5, sample cuvette*6, microfiber cloth, silicone oil, manual, carrying case



www.hoskin.ca | sales@hoskin.ca  
Vancouver | Edmonton  
Oakville | Montréal



## Portable Turbidimeters

	EPA Compliant	ISO Compliant
Premium	TN500	TN420
Basic	TN480	TN400

