



# Turb<sup>®</sup> 750 Series

LAB TURBIDIMETER WITH IRPC - THE INTELLIGENT VALUE CHECK



a xylem brand

# For any application:

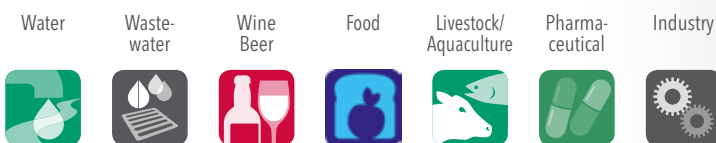
Whether it's about pure water or reliable product quality, **turbidity** is often an ideal parameter to use in many applications - and maybe even in fields you have not even thought of before:

- From water\* to wine,
- From juice quality to food cleaning processes,
- From fuel to pharmaceutical,
- From industry to aquaculture.

\*) To fulfill regulations in drinking water surveillance, two instrument models are available:

**Turb® 750 IR** according to DIN EN ISO 7027-1

**Turb® 750 T** according to US EPA 180.1



## Results you can trust

We make possible what the scattering properties of water allow: A highly precise turbidity measurement between 0–1100 FNU/NTU with automatic switch of measurement range providing the most technically accurate result possible!

The Turb® 750 Series turbidimeters assist you with sophisticated optics, eliminating uncertainty by means of a light trap and our IRPC procedure (see below for definition).

Turbidity	
[IRPC]	[AQA]
<b>0.10</b> FNU NTU	

Turbidity		
[3-P-Std-CAL]	[IRPC]	[AQA]
<b>157.0</b> FNU NTU		
[3-P-Std-CAL]	15.01.20 16:12	

Measurement with automatic range adaption

## A "stable" value must be a correct value

Particles in a solution are in motion and do not stop for the measurement. With the **I**ntelligent **R**eproducibility and **P**lausibility **C**heck (IRPC) procedure, quick multiple measurements with subsequent evaluation and elimination of outliers are performed. The result is "frozen" and shown as a stable reading.

This way, IRPC secures correct and repeatable results.



# Calibration with AMCO Clear<sup>®</sup> standards

Turb<sup>®</sup> 750 Series is supported by calibration with the proven AMCO Clear<sup>®</sup> Standards and the use of an optimal measurement window from the vials. A calibration kit for 3-point calibration is supplied with the meter. The following menu-guided calibration functions are available:

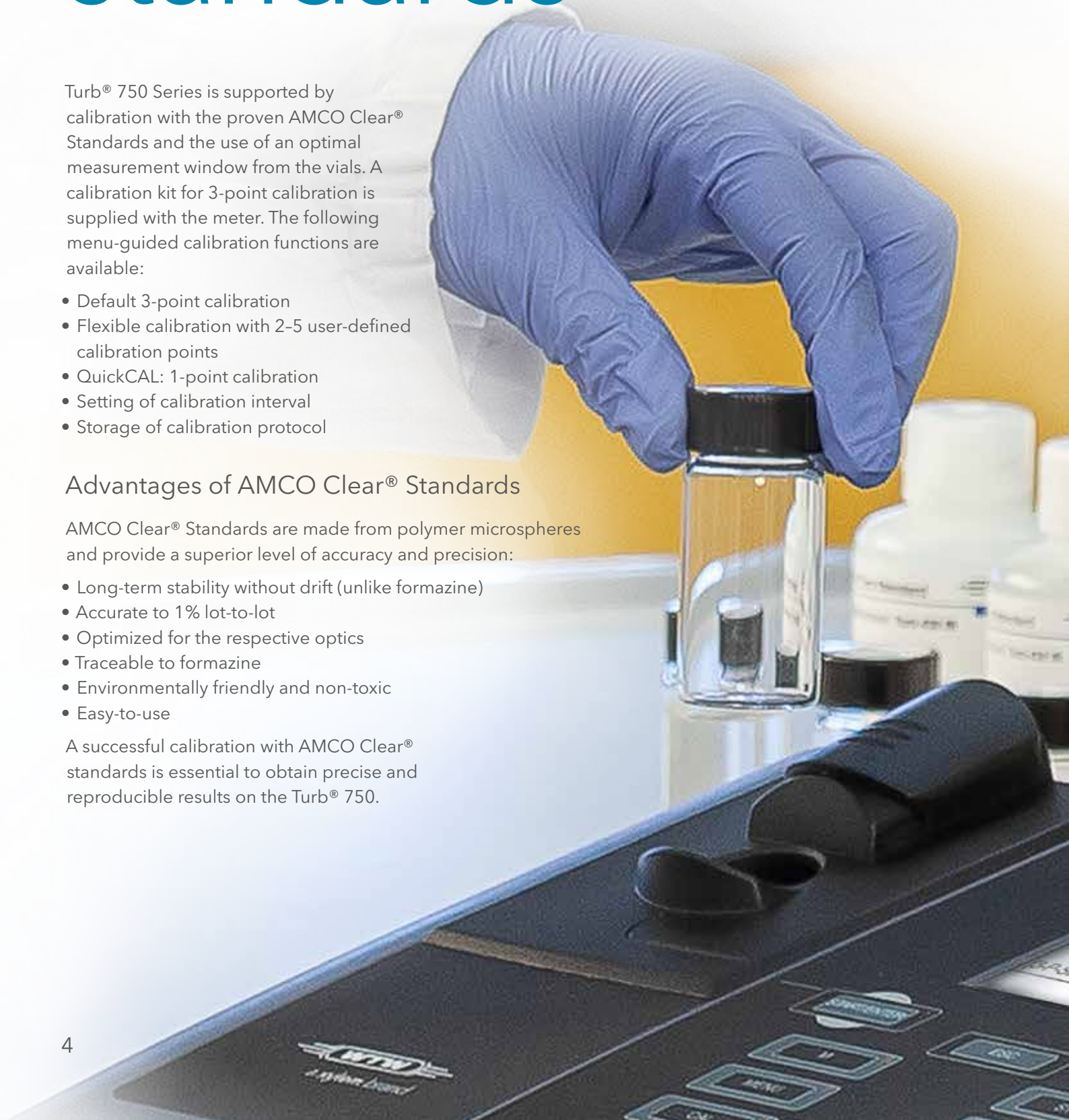
- Default 3-point calibration
- Flexible calibration with 2-5 user-defined calibration points
- QuickCAL: 1-point calibration
- Setting of calibration interval
- Storage of calibration protocol

## Advantages of AMCO Clear<sup>®</sup> Standards

AMCO Clear<sup>®</sup> Standards are made from polymer microspheres and provide a superior level of accuracy and precision:

- Long-term stability without drift (unlike formazine)
- Accurate to 1% lot-to-lot
- Optimized for the respective optics
- Traceable to formazine
- Environmentally friendly and non-toxic
- Easy-to-use

A successful calibration with AMCO Clear<sup>®</sup> standards is essential to obtain precise and reproducible results on the Turb<sup>®</sup> 750.



# Reliable results with AQA

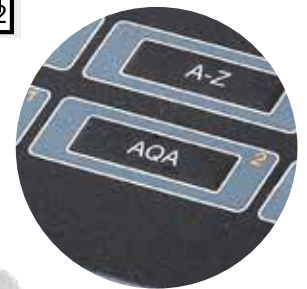
- Easy-to-clean keypad
- AQA support:
  - Interval
  - Tolerance
  - Protocol
- Direct access to essential functions
- AQA flag in the data sets
- Storage with sample ID
- Calibration interval and calibration protocol
- Data filter for data output
- GLP compliant data management

- AQA	
AQA:	On
AQA protocol:	
AQA tolerance:	10%
AQA interval:	90d
Standard:	10.0 FNU/NTU

Store (996 free)
15.01.2020 11:24:16
16.80 FNU/NTU
assign ID: 1
Store (ID: 1)

AQA settings

Storage with sample ID



Direct access to AQA functions



AMCO Clear®  
Kal.Kit 430/750 IR

# Data management with Turb® Data

Measured values are stored as data sets with the associated calibration protocol, sample ID and AQA informations.

The data output can be done either via the free Multilab Importer into Excel, printer or hyperterminal by pressing the print key or, more easily, with the supplied PC software Turb® Data:

- GLP compliant data transfer
- Instrument recognition via serial number
- User name input
- Output in CSV format
- Data export to Excel
- Data import into LIMS



# Technical Data

Instrument model	Turb® 750 IR	Turb® 750 T
Measuring standards	DIN EN ISO 7027-1	US EPA 180.1
Light source	Infrared LED	White light Tungsten filament lamp
Measuring mode	Nephelometric (90° scattered light)	
Display	Backlit graphics display, 160 x 104 Pixels	
Keypad	Easy-to-clean foil keypad with alphanumeric entry option	
Measuring range	0-1100 FNU/NTU	0-1100 NTU
Units	FNU/NTU	NTU
Resolution	0.01 FNU/NTU in the range 0.00-9.99 FNU/NTU, optional 0,001 FNU/NTU < 1 FNU/NTU 0.1 FNU/NTU in the range 10-99.99 FNU/NTU 1 FNU/NTU in the range 100-1100 FNU/NTU	
Accuracy	0.01 FNU/NTU or ± 2% of reading	0.01 NTU or ± 2% of reading, ± 3% in the range 500-1100 NTU
Repeatability	< 0.5% of reading	< 1% of reading
Reading mode	Measurement with Intelligent Reproducibility and Plausibility Check (IRPC) procedure, rapid settlement samples supported by fast response time and IRPC.	
Response time	4 sec	7 sec
Calibration - options	Default 3 points standard calibration, flexible calibration with 2-5 user defined calibration points, QUICKCal	
Calibration protocol and interval setting	yes/yes	
AQS-Support	Calibration protocol, AQA flag, cal flag	
Data storage	2500 data sets with cal protocol, AQA flag	
Sample Identification	Alphanumeric entry via keypad	
Firmware update	via USB	
Interface	RS 232, USB, printer via PC or RS232	
Storage condition instrument	-25... +65 °C (13...149°F)	
Operating temperature range	+5... +55 °C (41...131°F) +5... +40 °C (41...104°F) with power plug connected	
GLP-compliant PC software	Turb® Data	
Dimensions (H x W x D)	ca. 290 x 190 x 80 mm (11.42 x 7.48 x 3.15 inches)	
Weight	1.1 kg	
Calibration standards	Cal.Kit for 3-P standard calibration: long-term stable polymer AMCO® Clear standards, 0.02 - 10.0 -1000 FNU/NTU	
Vials , sample volume	28 mm diameter vials, min. volume 15 ml, borosilicate glass, phenolic resin cap, PTFE-coated rubber seal. No silicon oil required to cover scratches for measurement procedure!	
Sample conditions	Sample temperature < 70 °C (158°F)	
Power supply	Wide range power supply with plugs for Euro, US, UK and Australia	
Certificates	CE	
Delivery scope	Lab turbidimeter Turb® 750 IR/T, four 1.5 V AA type batteries, wide range power supply, cable USB-A to USB-B mini, six empty 28 mm vials, cap labels for orientation marking, Cal.Kit Turb® 430/750 IR or T, cloth, quick guide, compact operation manual, CD-ROM with extended manual, CD-ROM with Turb® Data PC software, inspection protocol	

## Ordering Information

Model	Description	Order No.
<b>Lab turbidimeters</b>		
Turb 750 IR	Turb® 750 IR lab turbidimeter with infra red LED according to DIN EN ISO 7027-1, single instrument with calibration standards set (0.02 - 10.0 - 1000 FNU/NTU), universal power supply 90-250 VAC, six empty vials, PC software Turb® Data	600120
Turb 750 T	Turb® 750 T lab turbidimeter with Tungsten white light according to US EPA 180.1, single instrument with calibration standards set (0.02-10.0-1000 NTU), universal power supply 90-250 VAC, six empty vials, PC software Turb® Data	600130
<b>Turbidity calibration standards</b>		
Kal.Kit Turb® 430/750 IR	Calibration standards set for Turb® 430 IR, Turb® 750 IR and photoFlex® Turb: 0.02 - 10.0 - 1000 FNU/NTU	600560
Kal.Kit Turb® 430/750 T	Calibration standards set for Turb® 430 T and Turb® 750: 0.02 - 10.0 - 1000 NTU	600561

# Xylem |'zīləm|

- 1) The tissue in plants that brings water upward from the roots;
- 2) A leading global water technology company.

We're a global team unified in a common purpose: creating advanced technology solutions to the world's water challenges. Developing new technologies that will improve the way water is used, conserved, and re-used in the future is central to our work. Our products and services move, treat, analyze, monitor and return water to the environment, in public utility, industrial, residential and commercial building services settings. Xylem also provides a leading portfolio of smart metering, network technologies and advanced analytics solutions for water, electric and gas utilities. In more than 150 countries, we have strong, long-standing relationships with customers who know us for our powerful combination of leading product brands and applications expertise with a strong focus on developing comprehensive, sustainable solutions.

For more information on how Xylem can help you, go to [www.xylem.com](http://www.xylem.com)

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