



Fishing in Muddy Waters?

Turb® 430 FIELD SETS – TURBIDITY MEASUREMENT FROM WATER TO WINE



a xylem brand

Lab Quality 2 Go

Turb® 430 IR/T

Turbidity is an important indicator parameter in production and quality control: From Fuel to Wine, from Water to Biotechnology.

Turb® 430 Series detect turbidity nephelometrically up to 1100 NTU. Explicitly for field monitoring of surface water, ponds or reservoirs, the Turb® 430 turbidimeter series offer complete functionality of lab meters in a practical field set:



Safe "Outdoor" Handling:

- Sturdy and waterproof (IP 67)
- With integrated profiled work bench
- Accessories tidily stored

Smart and Intuitive Operation:

- Working fast at the touch of a button
- Storing with Ident number (ID)
- Easy data transfer with filter option
- GLP compliant data management with LSdata

Calibration at its best:

- AMCO Clear® Standards
- User guidance
- Calibration interval setting
- Calibration protocol

AMCO Clear® Standards

- Best image of real world samples
- Non-hazardous and easy-to-dispose polymers
- Longterm stability in solution for best accuracy
- Ready to use
- Production accuracy $\pm 1\%$
- Traceable acc. to N.I.S.T.

Turb® 430 IR or Turb® 430 T: Choose the best solution matching your application!

Either go into the field with best lab quality. Or use the single meter offering a big lab solution by needing little bench space.

Ordering information

| Model | Description | Order No. |
|------------------|--|-----------|
| Turb® 430 IR SET | Turb® 430 IR (Infrared) Field set acc. DIN ISO with accessories: AMCO Clear® KalKit (0,02-10-1000 NTU), LSdata PC-Software, 4 Mignon batteries, 5 empty vials, optical cleaning tissues, screw driver for battery exchange, PC-connection cable RS232 AK 540 B, waterproof quick guide | 600321 |
| Turb® 430 T SET | Turb® 430 T (Tungsten) Field set acc. US EPA with accessories: AMCO Clear® KalKit (0,02-10-1000 NTU), LSdata PC-Software, 4 Mignon batteries, 5 empty vials, optical cleaning tissues, screw driver for battery exchange, PC-connection cable RS232 AK 540 B, waterproof quick guide | 600326 |
| Turb® 430 IR | Single instrument with AMCO Clear® KalKit (0,02-10-1000 NTU), 5 empty vials, 4 Mignon batteries, optical cleaning tissues. Optional LabStation with PC-Software and rech. battery (# 251 301) | 600320 |
| Turb® 430 T | Single instrument with AMCO Clear® KalKit (0,02-10-1000 NTU), 5 empty vials, 4 Mignon batteries, optical cleaning tissues. Optional LabStation with PC-Software and rech. battery (# 251 301) | 600325 |

For further informations, please order our complimentary catalogue „**Lab and Field Instrumentation**“ or visit our Website: **www.xylymanalytics.com**.



Turb[®] 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



2 year
guarantee

IP 67



Water



Waste-
water



Wine
Beer



Food



Livestock/
Aquaculture



Pharma-
ceutical



Industry

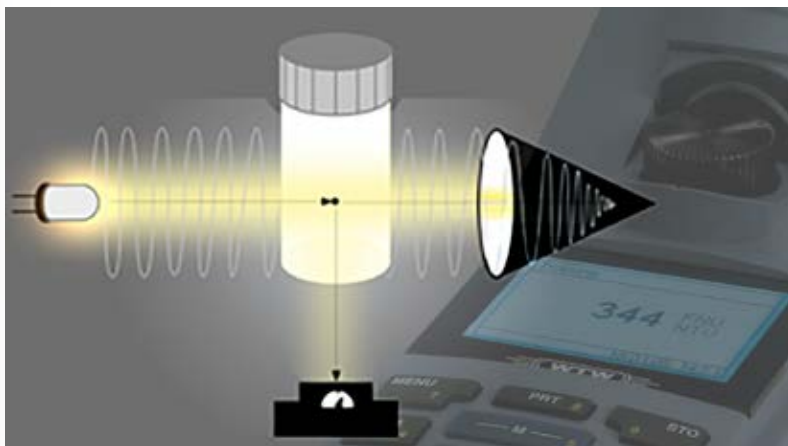




Results you can trust

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).



Optics with light trap: optimized for the elimination of ambient and transmitted light

IRPC: 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.

| Turbidity | |
|-----------------|-------|
| [IRPC] | [AQA] |
| 0.10 FNU NTU | |
| [3-P-Std-CAL] | |
| 1 | |

Measurement with automatic range adaption an IRPC

| Turbidity | |
|------------------|-------|
| [IRPC] | [AQA] |
| 157.0 FNU NTU | |
| [3-P-Std-CAL] | |
| 15.01.20 16:12 | |

The result is "frozen" and shown as a stable reading. This way, IRPC secures correct and repeatable results.

Calibration with AMCO Clear®

Turb® 750 Series is supported by calibration with the proven AMCO Clear® Standards and the use of an undisturbed 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 (0.02, 10.0, 1000 NTU/FNU)
- Flexible calibration with 2-5 user-defined calibration points
- PharmaCAL offering 3, 6, 12, 18, 30 NTU
- Lot# entry (optional)
- QuickCAL: 1-point calibration
- Setting of calibration interval
- Storage of calibration protocol

Advantages of AMCO Clear® Standards

AMCO Clear® 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® standards is essential to obtain precise and reproducible results on the Turb® 750.

Reliable results with AQA

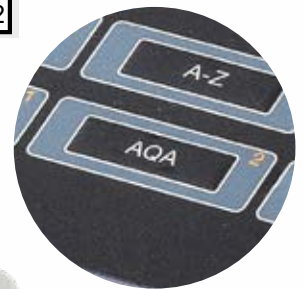
- Direct access to essential functions
- Simple user administration with password protection (4-digit PIN), 3 levels
- AQA support:
 - Interval
 - Tolerance
 - AQA proof standards
 - Protocol
- AQA flag in the data sets
- Alphanumeric sample ID
- Calibration interval and calibration protocol
- Data filter for data output
- GLP compliant data management/ MultiLab Importer offering barcode option

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

AQA settings

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

Storage with sample ID



Direct access to AQA functions



AMCO Clear®
Kal.Kit 430/750 IR

Data management with Turb® Data

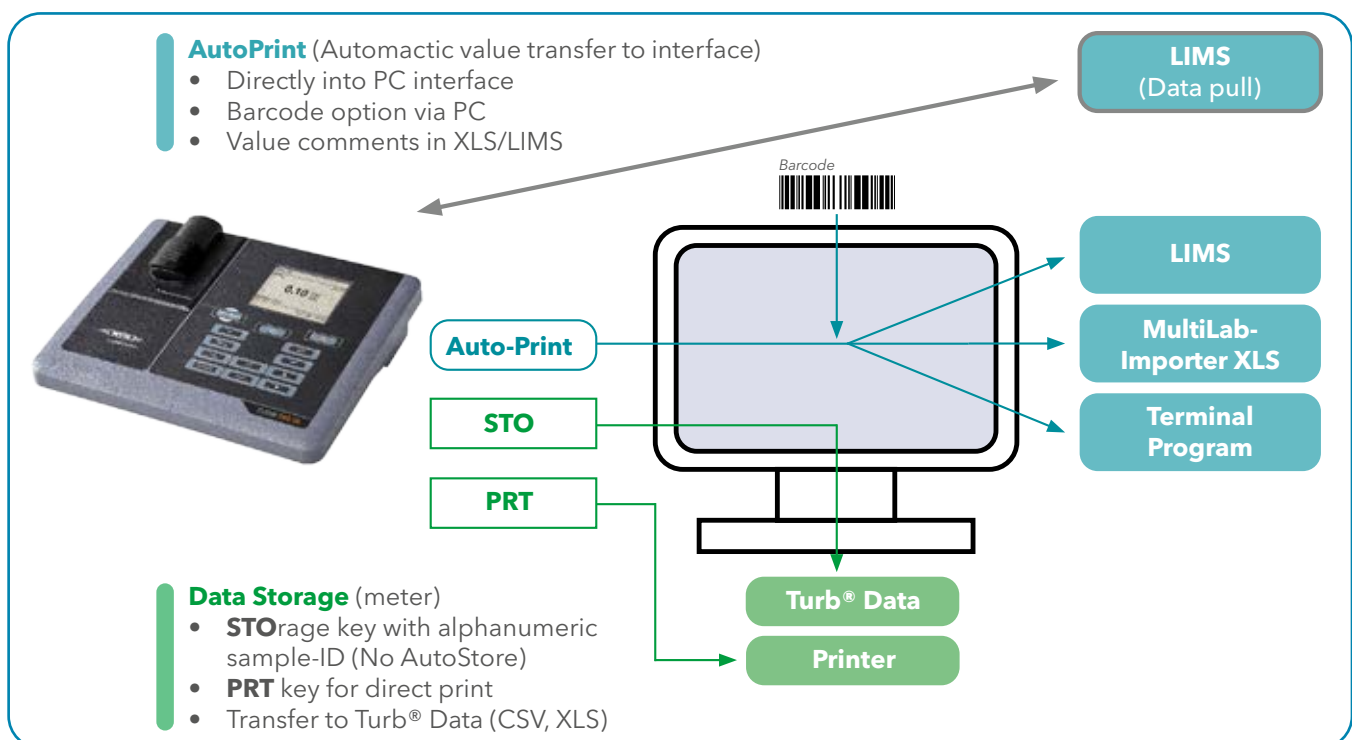
Measured values are stored as data sets with the associated calibration protocol, sample ID and AQA informations.

The data output offers multiple solutions for any need: From storage to print, transfer to PC via supplied PC-Software Turb® Data up to direct output into XLS with barcode ID and implementation of data into the company's specific LIMS. Data import into LIMS

For programmers, an instruction for the direct data transfer from instrument into company systems is available on demand.



Data Output for any need



Technical Data

| Instrument model | Turb® 750 IR | Turb® 750 T |
|---|---|---|
| Measuring standards | DIN EN ISO 7027-1 (830-890 nm) | US EPA 180.1 (400-600 nm) |
| 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. |
|--|--|-----------|
| Lab turbidimeters | | |
| 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 |
| Turbidity calibration standards | | |
| Kal.Kit Turb® 430/750 IR | Calibration standards set for Turb® 430 IR, Turb® 750 IR and photoFlex® Turb: | 600560 |
| | 0.02 - 10.0 - 1000 FNU/NTU | |
| Kal.Kit Turb® 430/750 T | Calibration standards set for Turb® 430 T and Turb® 750: 0.02 - 10.0 - 1000 NTU | 600561 |

Xylem | 'zīlēm|

- 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



Regional Sales Offices

| | | |
|---|---|---|
| UK: Xylem Analytics UK Limited Tel +44 1462 673581 salesuk@xylem.com www.xylemanalytics.co.uk | Asia: Xylem Analytics Japan Tel +81 (0)44-222-0009 ysijapan.support@xylem.com www.xylem-analytics.jp | North America: OI Analytical Phone: +1 979 690-1711 OI-Mail@xylem.com www.oico.com |
| Australia: Xylem Analytics Australia Tel +61 1300 995362 salesAus@xylem.com www.xylem-analytics.com.au | China: Xylem Analytics (Beijing) Co., Ltd Tel +86 10 5785 2266 Xylemanalytics.China@xylem.com www.xylemanalytics.cn | Middle East & Africa: Xylem Analytics Middle East & Africa Tel +971 4 806 1000 Info.MEA@xylem.com www.xylemanalytics.com |
| | France: Xylem Analytics France Tel + 33 (0)1 46 95 32 81 XAFciaIFR@xylem.com www.xylemanalytics.com | |

Visit our website for more contact info

Connect with us:  [wtw.wm](https://www.facebook.com/wtw.wm)  [wtwgmbhinternational](https://www.youtube.com/channel/UCwTgmbhinternational)  [xylemanalytics.germany](https://www.instagram.com/xylemanalytics.germany)

 [xylemanalyticsgermany](https://www.linkedin.com/company/xylemanalyticsgermany)

 [xylemanalyticsgermany](https://twitter.com/xylemanalyticsgermany)



Xylem Analytics Germany Sales GmbH & Co. KG, WTW
Am Achalaich 11
82362 Weilheim, Germany
Tel +49 881 1830
Fax +49 881 183-420
Info.WTW@xylem.com
www.xylemanalytics.com

All names are registered tradenames or trademarks of Xylem Inc. or one of its subsidiaries.
Technical changes reserved.
© 2020 Xylem Analytics Germany Sales GmbH & Co. KG. 999298US

June 2023