

Lovibond® Water Testing

Tintometer® Group



MD 100 COD, tube tests

Precise water control with proven and compact measuring system



- High-precision optics
- High accuracy and reproducibility through precision interference filter (5 nm)
- Industry specific parameter combinations available

Part Number: 276120

The MD 100 has several key features that make it a favorite among users.

Waterproof Design

The IP 68 design of this instrument ensures that the MD 100 remains water tight for up to 1 hour at 0.1 meter. Don't worry about dropping the instrument into a body of water - it floats!

Accurate, Reproducible Results

The optical system of the MD 100 utilizes LEDs and interference filters which quickly gives you results that you can be confident in. You always measure in the spectral peak.

User Calibration Mode

A one-point calibration is possible. Additionally, all MD 100 instruments have the ability to display readings directly in ABS or %T units.

One-time-Zero Function

Don't waste time waiting for your instrument to Zero after each test. When testing a new sample, zero the instrument once and all subsequent tests of that sample do not require you to re-zero the instrument.

Automatic Data Storage with Transfer Capabilities

The MD 100 automatically stores the last 16 readings with time and date stamp. These results can be transferred to a spreadsheet using the IRiM accessory.

Ergonomic Design

Whether you're using the MD 100 out in the field or in the lab, the design of the instrument makes it easy to handle and view the display. If you're using the instrument in the lab, the rubber feet on the bottom of the housing eliminates the need for two hand operation or to chase your instrument around the workbench.

Factory Programmed

All MD 100 instruments are supplied ready to use with up to 14 calibration curves. All you need to do is select the test you need, prepare your sample and test!

Scroll Driven Menu System

The simple interface allows you to quickly reach the test you need. When the instrument is turned on, it will automatically display the last test used.

2-Year Warranty

Industry

Chemical Industry | Food and Beverage Industry | Industries Others | Marine Industry | Municipalities | NGO | Oil and Gas | Pharmaceutical Industry | Power and Energy

Application

Raw Water Treatment | Waste Water Treatment

MD 100 COD, tube tests

The MD 100 COD is a dedicated, single parameter, instrument for COD Analysis. No need to purchase a multi-parameter colorimeter or spectrophotometer to get access to this critical waste water testing parameter!

The instrument utilizes Lovibond VARIO COD tube test reagents, which are available in three testing ranges. The reagents meet US EPA requirements for reporting purposes. Mercury-Free versions are also available for non-reporting purposes.

Please note, this instrument is supplied without reagents.

Also available is the Lovibond® [MD 100 COD Set](#). This combination of products supplies everything needed to setup a COD testing station - including the colorimeter, reactor and starter supply of reagents.

Note according to EU regulation 2019/1148

Acquisition, introduction, possession or use of this product by the general public is restricted by Regulation (EU) 2019/1148. All suspicious transactions, and significant disappearances and thefts should be reported to the relevant national contact point. See https://ec.europa.eu/info/index_en

Measuring Range

| Test Name | Measuring Range | Chemical Method |
|------------|------------------------------------|---|
| COD HR TT | 200 - 15000 mg/L COD ^{b)} | Dichromate / H ₂ SO ₄ |
| COD LMR TT | 15 - 300 mg/L COD ^{b)} | Dichromate / H ₂ SO ₄ |
| COD LR TT | 3 - 150 mg/L COD ^{b)} | Dichromate / H ₂ SO ₄ |
| COD MR TT | 20 - 1500 mg/L COD ^{b)} | Dichromate / H ₂ SO ₄ |

Technical Data

| | |
|---------------------------------|--|
| Optics | LEDs, interference filters (IF) and photo sensor in transparent sample chamber. Depending on the version, up to 3 different interference filters are used. Wavelength specifications of interference filters: 430 nm $\Delta\lambda$ = 5 nm 530 nm $\Delta\lambda$ = 5 nm 560 nm $\Delta\lambda$ = 5 nm 580 nm $\Delta\lambda$ = 5 nm 610 nm $\Delta\lambda$ = 6 nm 660 nm $\Delta\lambda$ = 5 nm |
| Wavelength Accuracy | ± 1 |
| Photometric Range | -2500 - 2500 mAbs |
| Photometric Accuracy | 3 % FS (T = 20 °C – 25 °C) |
| Suitable Vials | Round Cuvettes 16 mm |
| Display | backlit LCD (on keypress) |
| Interfaces | Infrared |
| Operation | Foil keypad |
| Auto – OFF | Yes |
| Calibration | factory calibration and user calibration. Reset to factory calibration possible |
| Internal Storage | internal ring memory for 16 data sets |
| Power Supply | 4 micro batteries (AAA) |
| Battery Life Time | approx. 17 hours |
| Clock | Real Time Clock and Date |
| Portability | Portable |
| Environmental Conditions | Temperature: 5 - 40 °C rel. humidity: 30 - 90 % (non condensing) |

| | |
|-------------------------|------------------|
| Protection Class | IP 68 |
| Compliance | CE |
| Dimensions | 155 x 75 x 35 mm |
| Weight | 260 g |

Delivery Scope

- Instrument in plastic case
- Adapter for ø 16 mm cuvettes
- 4 micro batteries (AAA)
- Syringe (1 ml)
- Syringe (2 ml)
- Instruction manual
- Quick Start Guide
- Certificate (COC)
- Warranty information

Accessories

| Title | Part Number |
|---|-------------|
| Water sampler with bottle 250 mL and lid, AF 631 | 170500 |
| Micro batteries (AAA), set of 4 | 1950026 |
| Multy cuvette-2, set of 12 | 197600 |
| Round cuvette 24 mm ø, set of 12 | 197620 |
| Sealing ring for round vials 24 mm ø, set of 12 | 197626 |
| Round cuvette 24 mm ø, set of 5 | 197629 |
| Cleaning cloth | 197635 |
| Round cuvette 16 mm ø, set of 10 | 197665 |
| Adapter for round cuvettes 16 mm ø | 19802190 |
| Mixing cylinder, 25 ml | 19802650 |
| Fixed price service package for MD100/MD110/MD200 | 19802701 |
| Service plan - 3 years for MD100/MD110/MD200 | 19802801 |
| Verification Standard Kit MD 100 / 200 | 215670 |
| Thermoreactor RD 125 | 2418940 |
| Stirring rod, 13 cm length | 364100 |
| Stirring rod, 10 cm length | 364109 |
| Stirring rod, 13 cm length, set of 10 | 364120 |
| Stirring rod, 10 cm length, set of 10 | 364130 |
| Membrane filter set for use when preparing samples, 25 membrane filters 0.45 µm, 2 syringes 20 ml | 366150 |
| 250 mL bottle, AF 631 | 375069 |
| Brush, 11 cm length | 380230 |
| Measuring beaker, 100 ml | 384801 |
| Cuvette stand for 6 round cuvettes Ø 24 mm | 418951 |
| Cuvette stand for 10 round cuvettes Ø 16 mm | 418957 |
| Plastic funnel with handle (white) | 471007 |
| Factory calibration certificate ISO 9001 for MD100/MD110/MD200 | 999750 |
| Additionally for each method | 999855 |

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