EasyPlus Density and Refractometry

Density Meters
Easy D30
Easy D40
Refractometers
Easy R40
Easy Brix
Easy Bev

Essential for Your Daily Routine
Simple, Rugged, and Trustworthy

METTLER TOLEDO

Digital Measurements
With EasyPlus Density and Refractometry

EasyPlus Density Meters and Refractometers offer all you need for your daily routine applications: fast measurements with automatic temperature control, small sample volumes and minimal operator dependency.

Digital density measurement

Designed to reduce the risk of errors, our digital density meters are easy to use and operator-independent. The oscillating U-tube accurately determines the density of your sample by measuring its frequency of oscillation and converting it into density.

Digital refractive index measurements

For users who require accuracy and ease of use, digital refractometers are the perfect choice, combining simple and quick measurements with an intuitive workflow. A high-resolution optical sensor rapidly measures the refractive index of your sample.

Fast temperature control

Our instruments feature built-in temperature control which enables you to obtain more accurate results. The integrated Peltier temperature control quickly heats up or cools down the measurement cell, allowing you to perform your analyses at the desired temperature.

As compact as a 1 L beaker

Designed to take up minimal space, the EasyPlus Density Meters and Refractometers' compact size and strikingly small footprints make them ideal for use in the laboratory, near the production line, or in storage and receiving areas.

Benefit from our guides, white papers, videos and more at
▶ **www.mt.com/DERE-Library**

Intelligently Simple
From Installation to Results

The highest level of performance comes from intuitive operation, which is why we designed our instruments to be operated by virtually anyone. Operation is as easy as a smartphone, allowing you to save time on training thanks to the app-based user interface.

Be ready to measure in minutes

Easily set up the instrument and measure right away: Use the integrated on-screen help to understand each parameter and prevent errors with integrated user guidance.

Start your analyses in a cinch

Thanks to LongClick™, measurements have never been easier. Simply press and hold to start your routine analyses and receive your results within seconds.

Observe your sample in real-time

Innovative design for maximum accuracy: Observe your density measurement via video and avoid measurement errors due to bubbles or improper sampling with our integrated BubbleCheck™ algorithm.
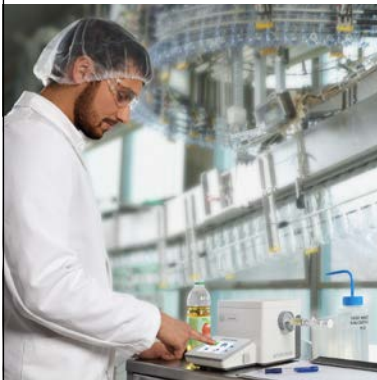
Drop and Go

Simplify your refractive index measurements with our FastStart™ technology: start your measurements the second the sample hits the cell – automatically and without pressing any buttons.

Learn more about our refractometers at
▶ **www.mt.com/EasyPlus-Refractometry**

Optimize Your Quality Control
On the Factory Floor

Having a rugged and reliable instrument is crucial for achieving efficient process quality control. We offer flexible solutions, engineered with high quality components and materials to guarantee a long instrument lifespan and withstand rough environments.

Ensure reliable results in rugged environments

Measure density near production line: The new measuring cell design minimizes the influence of external mechanical vibrations and allows for precise results even in turbulent environments.

Work carefree

With its splash-resistant touchscreen and a design which guides liquids away from its electronic components, the instrument is ready to be used near the production line. Work without worrying about spills or stray splashes.

Sample directly from the bottle

With a vertical design and a sampling funnel, the Easy Bev refractometer simplifies your workflow and maximizes your throughput. Sedimentation on the prism is minimized when measuring samples such as juices.

Precise results just a few steps away

Near the production line, every minute counts. Save time by bringing your analyses to the factory floor.
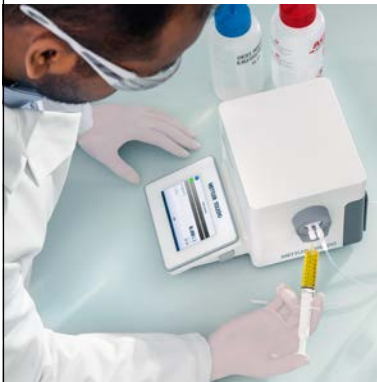
For specific applications in density and refractometry visit
▶ **www.mt.com/DERE-Applications**

Reliable by Design
Ensure Trustworthy Results

No matter the application, having credible results is a must. Our density meters and refractometers feature practical and efficient functionalities which ensure high results repeatability and stability for your analyses.
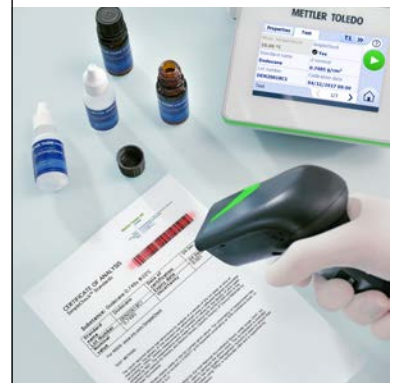
Receive your results in an instant

Measure density, refractive index as well as many related values, such as specific gravity, % alcohol, or Brix of your samples quickly and reliably. No need for table lookup or conversions: the instrument performs all necessary calculations.

Green, go. Red, stop

Simplify your routine measurements and instantly identify acceptable samples by setting up a range of tolerable limits for your sample. Color-coded results allow the user to quickly identify if a measurement is within or out of limits.

Rely on your results

With the built-in workflow using SimpleCheck™, instrument verification has never been so easy: whether you use a density meter or a refractometer, ensure accurate measurements with your instrument.

Say goodbye to your pen

Simple and straightforward, EasyDirect Density and Refractometry PC Software efficiently manages your data, allowing you to create reports and graphs, and to monitor your samples over time.

Learn more at
▶ **www.mt.com/EasyDirect-DERE**

The Perfect Solution
Model Overview

No matter your industry or application, we have the right solution for you.

Density meters

Technical and functionalities comparison table		Easy D30	Easy D40
Density (g/cm³)	Measuring range	0.000–3.000	0.000–3.000
	Accuracy	±0.001	±0.0005
	Resolution	0.001	0.0001
Temperature (°C)	Temperature range	15–25 (59–77 °F)	15–50 (59–122 °F)
	Accuracy	±0.2	±0.1
Measurement scales		Density and Specific Gravity	Density, Specific Gravity, Ethanol, Sugar tables, API functions, Acid tables, Urea, User-defined concentration
Number of methods		1	6
Minimal sample volume (mL)		Approximately 1.2	
Automatic bubble detection (BubbleCheck™)		No	Yes
Automatic viscosity correction		Yes	Yes
Clean Check		Yes	Yes
Dimension (W × H × D) (mm)		170 × 156 × 273 (6.7 × 6.1 × 10.7 inches)	

Refractometers

Technical and functionalities comparison table		Easy Brix	Easy R40	Easy Bev
Refractive Index (nD)	Measuring range	1.32–1.58	1.30–1.72	1.32–1.58
	Accuracy	±0.0001	±0.0001	±0.0001
	Resolution	0.0001	0.0001	0.0001
Brix (% w/w)	Measuring range	0–100	0–100	0–100
	Accuracy	0.05[1]	0.05[1]	0.05[1]
	Resolution	0.01	0.01	0.01
Temperature (°C)	Temperature range	15–25 (59–77 °F)	10–65 (50–149 °F)	15–25 (59–77 °F)
	Accuracy	0.1	0.1	0.1
	Temperature control	Yes[2]	Yes[2]	Yes[2]
Measurement scales		Refractive Index, Brix, Brix compensated 20 °C, Inverted sugar, HFCS42/55, Oechsle	Refractive index, Brix, Inverted sugar, HFCS 42/55, Oechsle, Chemical and Freezing point tables, User-defined concentration	Refractive Index, Brix, Brix compensated 20 °C, Inverted sugar, HFCS42/55, Oechsle
Number of methods		1	6	6
Automatic sample detection (FastStart™)		Yes	Yes	No
Minimal sample volume (mL)		Approximately 1.2		Approximately 6
Dimensions (W × H × D) (mm)		170 × 156 × 273 (6.7 × 6.1 × 10.7 inches)		215 × 385 × 200 (8.4 × 15.1 × 7.8 inches)

[1] Accuracy of 0.07 at approx. 10% w/w to 0.04 at approx. 80% w/w

[2] Temperature control can be turned off for instant results.

Accessories	Material Number
EasyDirect Density and Refractometry PC Software	30451628
Printer USB-P25	11124301
Barcode reader	21901297
USB Keyboard	51192111
Drying Tower (Desiccator, screwdriver, screws, drying tube with adaptor, silica gel) (for Easy D30 and Easy D40)	30468675
Wall mount kit (for Easy Bev)	30465247
SimpleCheck™ density standards	View our certified standards at
SimpleCheck™ refractive index/brix standards	▶ www.mt.com/SimpleCheck
Standard compliance	▶ www.mt.com/DERE-Norms

No Matter the Task
We Have the Right Solution

Density and Refractometry Excellence
Developed for a wide range of applications, our intuitive Excellence Density Meters and Refractometers measure almost any sample with a very high accuracy.

Melting and Dropping Point Excellence
When it comes to the determination of melting, boiling, cloud, slip melting, dropping, and softening points, our Excellence Melting and Dropping Point Systems offer tailored solutions to suit your needs.

EasyPlus™ Titration
EasyPlus™ Titrators from METTLER TOLEDO offer a simple and affordable solution for your routine titration applications. Save training time and make daily tasks simpler and more efficient thanks to the intuitive iTitrate™ user interface and intelligence.

Professional Service
Ensure professional installation with the StarterPac to confirm correct delivery and performance, with basic user training giving your operators confidence right from the start. For your audit, our calibration service provides a compliant and easy-to-read certificate.

www.mt.com/analytical

For more information

Quality certificate. Development, production and testing according to ISO 9001.

Environmental management system according to ISO 14001.

"European conformity". The CE conformity mark provides you with the assurance that our products comply with the EU directives.