

Density Meter



Applications:

- \* Beverage Industry: Measurement of sugar concentration, juice, herbal tea, food additives, and quality control of soft drinks.
- \* Food Industry: Quality control in the processing of grape juice, tomato juice, fruit syrup, vegetable oil, and soft drinks.
- \* Brewing & Liquor Industry: Determination of alcohol concentration in baijiu (Chinese liquor), yellow rice wine, red wine, beer, fruit wine, rice wine, etc.
- \* Petrochemical Industry: Testing of crude oil API gravity, gasoline and diesel density, and monitoring of additive blending processes.
- \* Chemical Industry: Testing of urea, detergents, ethylene glycol, acid, alkali, and ammonia concentrations in chemical products.
- \* Pharmaceutical Industry: Quality control of raw materials and pharmaceutical intermediates; determination of specific gravity and density of drugs.
- \* Flavors & Fragrances: Raw material testing for edible flavors, daily-use fragrances, tobacco flavors, and food additives.
- \* Machinery Manufacturing: Testing of cleaning agents for metal processing, machine manufacturing, automotive industry, and electronic/electrical appliances.
- \* Inspection & Testing Institutions: Density measurement of liquids in standard laboratories, statutory testing institutions, and third-party testing organizations.

Features:

- \* Built-in Measurement Units: all three models support density(g/cm³, kg/m³) and specific gravity at 4°C/20°C/25°C.  
BK-DM430A: adds user-defined formulas.  
BK-DM450A: integrates 30+ measurement methods(General, food, petrochemical, daily chemical, pharmaceutical, user-defined).
- \* Measurement Modes: all models feature precision measurement / rapid preliminary inspection modes.
- \* Software & Compliance Functions(BK-DM450A / BK-DM430A): equipped with user-defined methods, user hierarchical management(4-level authority), and audit trail(Optional with FDA software).
- \* Sampling System: all models are fitted with HD cameras for video sampling observation. The sampling mode is automatic (Manual compatible) and supports various samplers.

Technical Parameters:

| Model                            | BK-DM450A                                                                                                    | BK-DM430A    | BK-DM350A                           |
|----------------------------------|--------------------------------------------------------------------------------------------------------------|--------------|-------------------------------------|
| Measuring Range                  | 0.00000~3.00000g/cm³                                                                                         |              |                                     |
| Measuring Resolution             | 0.00001g/cm³                                                                                                 |              |                                     |
| Measuring Accuracy               | ±0.0001g/cm³                                                                                                 | ±0.0003g/cm³ | ±0.0005g/cm³                        |
| Measuring Repeatability          | ±0.00005g/cm³                                                                                                | ±0.0001g/cm³ | ±0.0002g/cm³                        |
| Temp. Resolution                 | 0.01°C                                                                                                       |              |                                     |
| Temp. Control Range              | 5~70°C                                                                                                       |              | 5~50°C                              |
| Temp. Control Precision          | ±0.02°C                                                                                                      |              | ±0.05°C                             |
| Temp. Control Accuracy           | ±0.05°C                                                                                                      |              | ±0.1°C                              |
| Automatic Viscosity Compensation | Yes                                                                                                          |              | /                                   |
| Calibration Method               | Dry air / Distilled water                                                                                    |              |                                     |
| Data Storage                     | 128 G                                                                                                        |              |                                     |
| Sampling Observation             | HD camera, video observation                                                                                 |              |                                     |
| Sampling Mode                    | Automatic(Manual compatible), optional multiple samplers                                                     |              |                                     |
| Display Mode                     | 10.1-inch color LCD touch screen, Android OS                                                                 |              |                                     |
| Communication Interface          | RS232*1, RJ-45*1, USB*3                                                                                      |              | RS232*1, USB*3                      |
| Optional Accessories             | Thermal printer RD-TH32-SC, dot matrix printer RD-TH24-SC, WIFI printer, Audit trail function (FDA software) |              | Dot matrix printer, thermal printer |
| Report Output                    | PDF / Excel                                                                                                  |              |                                     |
| Power Supply                     | AC 100~240V, 50/60Hz, 120W                                                                                   |              |                                     |
| External Size (W*D*H)            | 439*350*217mm                                                                                                |              |                                     |
| Package Size (W*D*H)             | 720*470*390mm                                                                                                |              |                                     |
| Net Weight                       | 10kg                                                                                                         |              |                                     |
| Gross Weight                     | 23.5kg                                                                                                       |              |                                     |