

MicroDens

October 2026



 Density /
Density@20 °C

 Concentration in
binary solutions

 Temperature
compensation

 ITA/ENG/DEU/
FRA/ESP

 Beer fermentation
monitoring °P

 Wine must evaluation
°Brix, °Babo, °Baumé

 USB

 Bluetooth

DENSITY

Measuring range	0.600 ... 1.200 g/cm ³
Resolution	0.00001 g/cm ³
Repeatability (s.d.)	0.00005 g/cm ³
Accuracy	0.0001 g/cm ³

TEMPERATURE (SAMPLE)

Measuring range	-10 ... +60 °C
Resolution	0.01 °C
Repeatability (s.d.)	0.1 °C
Accuracy	0.1 °C

ALCOHOL CONCENTRATION (ABV)

Measuring range	0.00 ... 100.00 % v/v
Resolution	0.01 % v/v
Repeatability (s.d.)	0.05 % v/v
Accuracy	0.1 % v/v

VISCOSITY

Measuring range	up to 50 mPa·s, calibrated up to 5 mPa·s
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SAMPLE

Minimum volume	1 mL
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FUNCTIONS

2.8" color touch display, UP, DOWN and SET keys, PUSH key for sample intake

Membrane keypad

SmartStabilizer: automatic sample detection, distinct from cleaning and sample changes ("Detected" when successive fillings agree)

Quality-control limits, with red-background highlighting of out-of-tolerance values

Menu PIN protection

5 measurement modes: Precise, Fast, Manual, Slow, Viscous

GENERAL FEATURES

Dimensions (L × W × H) 320 mm × 100 mm × 65 mm

Weight 380 g (battery pack and filling tube included)

Seals Viton

Languages English, Italian, French, Spanish, German

Data memory 2000 sets of measured data

Methods Food & Beverage package and up to 20 user methods

Interfaces USB-C / Bluetooth

PC software MicroDens Data Logger, MicroDens USB Extractor, MicroDens Script Runner (configuration and firmware): free
MicroDens Logger Pro: licensed

PREDEFINED METHODS

Density / Specific Gravity

Alcoholic Strength in % v/v and % w/w at 20 °C; US Proof and % v/v at 60 °F (Spirits US method)

Sugar Tables (°Brix, °Plato, °Babo/KMW, °Baumé, °Oechsle)

Dry Extract (wine and beer; calculated parameters: OG, FG, real extract, ABV, ABW, attenuation)

Concentration (%) in binary solutions (sucrose, glucose, fructose, glycerol, propylene glycol, NaCl)

OPERATING CONDITIONS

Ambient temperature 0 ... +40 °C

Storage temperature max 55 °C with batteries
max 70 °C without batteries

Air humidity 5–90 % relative humidity, non-condensing

POWER SUPPLY

Battery type Li-Pol battery pack, 3.7 V,
2500 mAhBattery life 10 hours of continuous use,
100 hours on standby

STANDARDS AND REFERENCES

Measuring principle	Electronic densimetry with an oscillating tube, based on the principle of method B of OIV-MA-AS2-01 (density and specific gravity at 20 °C) and OIV-MA-AS312-01 (alcoholic strength by volume)
Alcoholic strength	Calculated from density with the OIML R 22 International Alcoholometric Tables, as required by OIV-MA-BS-01 and Commission Regulation (EC) No 2870/2000; identical at 20 °C to OIV-MA-AS312-02, Table I
Strength at 60 °F (US)	US Proof, % vol at 60 °F and SG 60/60 °F, calculated on the basis of the AOAC/TTB tables (27 CFR 30.66, Table 6)
Total dry extract	Calculated according to OIV-MA-AS2-03B
Water density	Tanaka et al. (2001), Metrologia 38
Note. The real alcoholic strength of wines and spirits is determined on the distillate. Results are referred to 20 °C by temperature compensation.	



Warnings

Specifications subject to change without notice.

Gibertini instruments are intended exclusively for scientific use and internal control.

Not suitable for use in potentially explosive atmospheres.

The Spirits US method is intended for quality control and label verification; it does not replace instruments approved for the fiscal determination of proof. For Canada (strength at 20 °C), the Ethanol method applies.

CE CONFORMITY



MicroDens complies with the following directives:

2014/30/EU electromagnetic compatibility

2014/35/EU low voltage

2014/53/EU radio equipment

2011/65/EU RoHS

Applied standards

EN IEC 61326-1:2021

EN IEC 61326-2-3:2021

EN IEC 61010-1:2013

ETSI EN 301 489-1 V2.2.3:2019

ETSI EN 301 489-17 V3.3.1:2024

Information and quotations

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