

LABORATORY DIFFERENTIAL REFRACTOMETER mod. DR10
OPERATIVE SPECIFICATIONS

Application:	The instrument is a digital differential refractometer of the latest generation expressly designed for laboratory measurements in the beverage industry, where it is used for the measurement of Diet beverages
Measurement type:	Simultaneous laboratory refractometric measurements of the Refraction Index of the water utilized in the production of beverages and the samples to be analyzed. Automatic calculation of the two measurements and conversion into the preset unit
Measurement limits:	0...20 RD
Accuracy:	0.5% of measurement, max accuracy 0.00125 RD
Measurement scales displayed:	"%STANDARD"; equivalent "Total Acidity", obtained via linear conversion (which can be set) of the RD Refractometric Degree scale (maximum conversion factor which can be set = 1000); Brix; RD Refractometric Degree
Product temperature:	5... 25 °C (41...77 °F)
Analysis time:	7 minutes for a complete cycle
Quantity of analyzed sample	Product: ~100 cc for each test Water: ~50 cc for each test

GENERAL SPECIFICATIONS

Power supply	Electric: AC 100... 240V ±10% 47... 63Hz 150VA DC 24V ±10%, 80mA Connection by means of cable with SP7748 (EEC-7) 10A/250V plug for EC or P620 15A/125V plug for USA versions
Interfaces	Usb: Type A for external connection Ethernet: RJ-45 for external connection PS/2: N°1 MiniDIN 6 P.F. for external keyboard and mouse connection

CONSTRUCTION FEATURES

Execution:	AISI 304 Stainless Steel monobloc enclosure
Measurement section:	Differential measurement prism in "N-BK10". Electronically compensated LED light sources. "CCD" sensitive element. Transfer of the process water and product from beakers to the collection container by means of peristaltic pumps. Automatic product heating and degassing. Automatic calibration of zero setting. Temperature expressed in °C or °F.
Electronic section:	Microprocessor controlled industrial CPU Monoboard. Graphic display of the measurement, software menus and error messages by means of 800 x 600. 10.4" colour LCD touch screen and touch pen. 2GB flash memory.
Accessories:	N°1 600 ml Plexiglass Beaker for process water. N°1 600 ml Plexiglass Beaker for product (approx. 100 ml for the measurement). N°1 Plastic container for collection of discharged fluids.
Dimensions and weight:	365 (w) x 506 (h) x 419 (d). ~26 kg without the accessories supplied with the instrument. ~27 kg with the accessories supplied with the instrument.

TECHNICAL NORMATIVE SPECIFICATIONS

Environmental Characteristics	Temperature limits: Ambient: 18...28 °C (64.4...82.4 °F) Storage: -20...+70 °C (-4...+158 °F) Humidity limits: Ambient: 5%...85% (R.H. non-condensing) Storage: 5%...85% (R.H. non-condensing) Altitude limits: <2000 m a.s.l Pollution rating: "2" according to IEC664 Protection rating: IP20 according to EN60529
Conformity to Directives:	EMC: 2014/30/EU EC: REGULATIONS 1935/04/EC CE marking of conformity to Directives EU