

DIGITAL LABORATORY REFRACTOMETER mod. LR05
OPERATING SPECIFICATIONS

Application:	Measurement of liquid products in laboratories in the Food, Chemical, Textile, Petrochemical Industries, wineries, etc.
Type of measurement:	Refractometric measurement in the laboratory of the Refractive Index and display in the selected scale of the relative concentration, with temperature compensation already applied
Measurement limits:	1.3271...1.5318 nD 0...95 Brix (STD Version) 1.3271...1.5318 nD 0...95 Brix (HA Version) 1.3271...1.5318 nD 0...95 Brix (SA Version)
Accuracy:	<p>Standard Accuracy version: (1.3271...1.5318 nD): ± 0.00007 nD (0...95 Brix): ± 0.05 Brix</p> <p>High Accuracy version (HA) 1.3271...1.5318 nD): ± 0.00005 nD (0...95 Brix): ± 0.03 Brix</p> <p>Super Accuracy version (SA) 1.3271...1.5318 nD): ± 0.00002 nD (0...95 Brix): ± 0.01 Brix</p> <p>Note: for all models, the accuracy refers to the measurement of sucrose solution certified up to 50 Brix at 20 °C</p>
Measurement scales	Measurement scales selectable from PC Panel: nD. "BRIX"; the "BRIX" scale is based on the nD/Bx ICUMSA (1974) conversion tables. 999 Scale USER totally configurable.
Product temperature:	<p>Standard Accuracy Version: 5...45 °C</p> <p>High Accuracy Version: 5...45 °C.</p> <p>Super Accuracy Version: 5...60 °C</p> <p>with automatic compensation of the temperature measured by means of Temperature resistance Pt1000 in ceramic, Class "B" in accordance with IEC751; for "User" scale fields the compensation is based on the values set in the software</p>
Quantity of sample analyzed:	~3 cc for analysis

GENERAL SPECIFICATIONS

Power supplies	<p>LR05: DC24V 50W AC 100...240V, 1.5A, 50/60Hz, Connection via cable with EU (Schuko) plug and specific universal adapter</p>
Interfaces	<p>Ethernet: For connection to Personal Computer or Printer; connection by means of RJ45 GbE connector</p> <p>USB#1: For connection with mouse, keypad or USB port, connection by means of USB Type-A 2.0 female connector</p> <p>USB#2: For connection with mouse, keypad or USB port, connection by means of USB Type-A 2.0 female connector</p>

CONSTRUCTION FEATURES

Execution:	Modular assembly consisting of Refractometer model MD01, Multiparametric Receiver MP05 and INOX AISI 304 stainless steel support.
Refractometer MD01:	Synthetic sapphire measurement prism. Electronically compensated LED light source. CCD sensitive element. "Pt1000" temperature sensor inside the appliance. INOX AISI 316 stainless steel analysis basin, with plastic cover.
Notes:	The optical section of the equipment is dehumidified by means of a desiccant molecular sieve cartridge
MP05 Multiparametric Receiver	PC Panel module. Indication of measurement and software menu by means of TFT LCD 6.5" 640x480 with "LCD Saving" function, resolution 640x480 5-w Resistive type touchscreen, resolution 4096 x 4096 CPU Intel Celeron® N2807 1.58GHz 4.5W Dual Core onboard
Materials in contact with the product:	AISI 316 stainless steel analysis bowl. Synthetic sapphire measurement prism. PTFE gasket.
Dimensions and weight:	406 (l) x 154(a) x 284 (p) , ~5 kg

TECHNICAL-NORMATIVE SPECIFICATIONS

Environmental features	Temperature limits: Environment: 5...45 °C Storage: -20...+50 °C Humidity limits: Environment: 10%...95% (R.H. without condensate) and Storage 40 °C: 5%...95% (R.H without condensate) Altitude limits: <2000 m a.s.l. Pollution Degree: "2" - in accordance with IEC664 Degree of Protection: IP65 in accordance with EN60529
Conformity to Directives:	EMC: 2014/30/EU WEEE: 2012/19/EU CE marking of conformity to EU Directives