

TECHNICAL SPECIFICATIONS AND STANDARDS

Ambient Characteristics

Temperature Limits:

Ambient: 5...45 °C
Storage: -20...+50 °C

Humidity Limits:

Ambient: 5%...95% (R.H. non-condensing)
Storage: 5%...95% (R.H. non-condensing)

Altitude Limits: <2000 m a.s.l.

Pollution Category: "2" to IEC664

Protection category: IP65 to EN60529

Conformity to Directives

EMC: 2004/108/EC and subsequent modifications

WEEE: 2002/96/EC and subsequent modifications

*CE mark shows conformity to listed EU Directives.

OPERATIVE SPECIFICATIONS

Application: Measurement of liquid products in laboratories in the Food, Chemicals, Textile, Petrochemical industries, wineries, etc.

Measurement type: Refractometric measurement in laboratory of the Refraction Index and display in the selected scale of the relative concentration with automatic temperature compensation.

Measurement Limits: 1.3300...1.5318 nD.
0...95 Brix.

Accuracy: (1.3300...1.3811 nD): ± 0.00007 nD.
(0...30 Brix): ± 0.05 Brix.
(>1.3811...1.5318 nD): ± 0.00014 nD.
(>30...95 Brix): ± 0.1 Brix.

Measurement Scales: N° 5 measurement scales selectable from the keypad:
- nD
- BRIX; the "BRIX" scale refers to the nD/Bx ICUMSA (1974) conversion tables.
- HFCS42 and HFCS55 with adjustable Zero value.
- N°1 "USER" scales totally configurable from the keypad.

Product temperature: 5...45 °C with automatic compensation of measured temperature by means of ceramic "Pt1000" sensor, Class "B" according to IEC751; compensation for "User" scale ranges refers to the values set on the utility software.

Quantity of analyzed sample:

~3 cc for analysis.

GENERAL SPECIFICATIONS

Supplies

LR-02: DC 5...7.5V 2.5W – Connection to external power supplier via 4-pin male circular connector.

Power supp.: AC input 115/230V $\pm 10\%$ 50...60Hz, DC output 7.5V 420mA.
Connection via cable with SP7748 (EEC-7) 10A/250V plug for EC versions and with P620 15A/125V plug for US versions.

Batteries: Battery case (optional) for 5x1.5V type AA alkaline batteries or 5x1.2V 2000mAh Ni-MH rechargeable batteries.

Interfaces

Serial: RS232 for connection to a PC or Printer; connection via male 9-pin D-connector.

CONSTRUCTION FEATURES

Execution: One-piece 304 AISI stainless steel enclosure.

Measure. Section:

- Synthetic sapphire measurement prism.
- Electronically compensated LED light source.
- CCD sensor element.
- Internal Pt1000 temperature sensor.
- Analysis bowl in 316 AISI stainless steel, with cover and cover position sensor.

The optical section of the unit is dehumidified by means of a molecular sieve desiccant cartridge.

Electronic section:

- Microprocessor CPU.
- Measurement readings, program menus and error messages presented on a 128x64 point backlit graphic LCD display with "LCD Saving" function.
- Moulded keypad in scratchproof polyester with dome keys.
- Automatic zero calibration.
- Temperature readings in °C or in °F.
- Overcurrent protection with 5x20 mm fuse.

Product contact materials:

- Analysis bowl in 316 AISI stainless steel.
- Synthetic sapphire measurement prism.
- PTFE gasket.

Dimensions: 164 (w) x 149.5 (h) x 295 (d)

Weight: 6 kg.

ACCESSORIES

- Graphic or continuous reel printer.
- Battery charger set for Ni-MH rechargeable batteries.