

TECHNICAL SPECIFICATIONS AND STANDARDS

Ambient Characteristics

Temperature Limits:

Ambient: 5... 45 °C (for sugar solutions)
Storage: -20...+70 °C

Humidity Limits:

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

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

Protection category: IP52 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 natural, stopped, concentrated or fermenting musts and wines and fermentation process control in Winery laboratories.

Measurement type: Refractometric and conductivity measurement display in selected scale of temperature compensated measurement, monitoring of fermentation trend, administration of enrichment and additions with recording and graphic processing of analytical data.

Measurement limits: 1.3330...1.5177 nD.

Automatic conversion of reading in the following measurement scales, with limits corresponding to:

0...90 degrees BRIX 0...35 degrees BABO
0...40 degrees BAUME'

0...80 g/l x Total Extract
0...30% v/v x Potential alcohol
0...20% v/v x Distilled alcohol
0...5 mS/cm x Conductivity

Accuracy: ±0.0004 nD (±0.03 Brix) or equivalent for corresponding scales.
>1 g/l for wines and musts.
>0.1 v/v for distillates.
>2 g/l for fermentation musts.
>0.05 mS/cm.

Measurement scales: N°6 measurement scales selectable from touch screen:
-BRIX, BABO, BAUME'; the "BRIX" scale is referred to the nD/Bx ICUMSA conversion tables.
-N°1 "USER DISTILLATES" scale utilized for alcohol contents of distillates.
-N°2 "USER" scales configured as "Potential alcohol" and "Volumetric Mass".

Product temperature: 5...45 °C with automatic compensation of temperature measured by means of Pt1000 ceramic temperature sensor, Class "B" to IEC751.

Quantity of analyzed sample:
~3 cc for concentration analyses.
~20 cc for conductivity measurements.

Cycle duration: 5...30 s depending on type of analysis.

GENERAL SPECIFICATIONS

Supplies

Electrical: DC +5V 4A, +12V 2A, -12V 0.5A with power supply: AC 100...240V ±10% 47...63Hz 50VA. Connection power supply via cable with SP7748 (EEC-7) 10A/250V plug for EC versions or P620 15A/125V plug for US versions.

Interfaces

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

Parallel: CENTRONICS for Printer connection – via 25-pin female D-connector.

Usb: A type for external connection.

Ethernet: RJ-45 for external connection.

PS/2 MiniDIN 6P.F. for external connection keyboard and mouse.

CONSTRUCTION FEATURES

MEASUREMENT SYSTEM

Execution: One-piece enclosure in 304 AISI stainless steel.

Measur. section:
-Synthetic sapphire measurement prism.
-Electronically compensated LED light source.
-CCD sensor element.
-Internal "Pt1000" temperature sensor.
-316 AISI stainless steel measurement bowl.

The unit's optical section is dehumidified by means of a Molecular Sieve desiccant cartridge.

Electronic Section:
-Microprocessor CPU main unit.
-Measurement readings and program menus presented on 2x16 character backlit alphanumeric LCD.
-Moulded keypad in scratchproof polyester with dome keys.
-Automatic zero calibration.
-Automatic Start with sensor on cover analysis bowl.

Product contact materials:

-Measurement bowl in 316 AISI stainless steel.
-Synthetic sapphire measurement prism.
-Silicone coated fibreglass fabric.

PROCESSING SYSTEM

Execution: One-piece 304 AISI stainless steel enclosure.

Electronic section:
-Industrial monoboard microprocessor CPU.
-Graphic displays on 800x600 10.4" touch screen.
-512 MB Flash Memory.
-External power supplier housed in black ABS bookstand enclosure.
-Facility for "Miscellaneous Analyses" or administration of "Lots" recording all the operations and analyses performed periodically for each fermentation tank.

Dimensions and weight:

342 (w) x 319 (h) x 485 (d), 11.5 kg