### TECHNICAL SPECIFICATIONS AND STANDARDS

#### Ambient Characteristics

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temperature</td>
<td>5...45 °C (for sugar solutions) / -20...+70 °C</td>
</tr>
<tr>
<td>Humidity</td>
<td>5%...95% (R.H. non-condensing) / 5%...95% (R.H. non-condensing)</td>
</tr>
<tr>
<td>Altitude</td>
<td>&lt;2000 m a.s.l.</td>
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</tbody>
</table>

#### Protection category
- IP52 to EN60529

#### Conformity to Directives
- EMCE: 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.

#### 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".

#### 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.

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

#### Dimensions and weight
- 342 (w) x 319 (h) x 485 (d), 11.5 kg

### 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.
- Measurement section: Synthetic sapphire measurement prism.
  - Electronically compensated LED light source.
  - 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.
- Molded keypad in scratchproof polyester with dome keys.
- Automatic zero calibration.
- Automatic Start with sensor on cover analysis bowl.

#### 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.