

REFRACTOMETER



It is a **fully Automatic, Digital Refractometer**, featuring **electronic cooling and heating**.

It measures the widest possible range of **Refractive Index from 1.26 to 1.72 RI**.

It is available with an **optional Temperature Controlled Sample Presser** that touches the sample.

The optional Presser reduces the empty volume of the measurement area thereby decreasing evaporation and at the same time helping to evenly spread semi-solid materials over the refractometer's measurement prism.

FEATURES:

- 1) This Versatile Refractometer offers **1 pt, 2 pt, or a full multi-point calibration**. Calibration can be done at 20°C, 25°C or any user selectable temperature within the available range
- 2) Refractometer with **Dual Temperature Control System**: This digital refractometer has temperature control from both above and below the sample.
- 3) **Data Storage Options**: With 32mb of on-board memory the J257 can work on a stand-alone basis or memory sticks can be utilized to expand memory or make data easily transportable to a PC.
- 4) Easy To Read **LCD Interface**: A large 7.5cm x 10cm cold cathode fluorescent back lit, digital LCD allows the scale, sample temperature, set temperature, air temperature, time, date, and temperature correction status to be easily viewed. All functions are activated through a touch screen panel
- 5) **Automatic Refractometer Operation**:

SPECIFICATIONS:

- 1) **Measurement Scales**: Refractive Index (RI) BRUX (% sucrose) Temperature Corrected BRUX Temperature Corrected RI 100 User Programmable Scales
- 2) **Measurement Range**: 1.26 - 1.72 RI, 0 - 100 BRUX
- 3) **Resolution**: Refractive index ± 0.0001 (Standard), ± 0.00001 (Optional) BRUX ± 0.1 (Standard), ± 0.01 (Optional)
- 4) **Repeatability**: ± 0.0001 RI, ± 0.1 BRUX
- 5) **Accuracy**: ± 0.0001 RI, ± 0.1 BRUX
- 6) **Optional Wavelength**: 589.3nm (other wavelengths available)
- 7) **Prism**: Industrial Sapphire
- 8) **Light Source**: Light Emitting Diode (est. life: >100,000 hrs.)
- 9) **Response Time**: Continuous readout or user programmable delay (i.e. a 25°C sample can be cooled to 20°C and measured in 20 seconds)
- 10) **Communication**: 3 USB RS232 ports Cat5 Network (Ethernet)
- 11) **Analog Control**: 0-10 volts, 4-20 mA
- 12) **Temp. Control Range**: 10°C - 100°C *other temperature control options are available - 5°C – 110°C available with temperature boost option.
- 13) **Temp. Sensor Accuracy**: $\pm 0.05^\circ\text{C}$
- 14) **Temp. Control**: Prism surface and presser
- 15) **Calibration**: 1, 2 or full multi-point calibration
- 16) **Power Requirement**: 100-240 volts, 50 Hz - 60 Hz