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Specification **Bench Refractometer (S074)**

Bench Refractometer Product Code: VRFM330

Measurements Specifications

Scales Range Resolution Accuracy Other available Scales Automatic Temperature Compensation Reading Time (seconds) Working Temperature Range Temperature Sensor Accuracy Sample Temperature Stability Interface Ambient Humidity Range Order Code

Physical Specifications

Prism Prism Dish Sample Illumination Wavelength **Temperature Control** Display Housing

Electrical Specifications External Power Supply

Software Specifications

Printer Formats

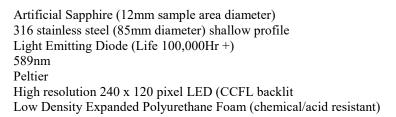
Primary Features

Methods System Temperature Stability Checks User Zero/Span Capabilities AG Fluid Compensation Acid Correction Density/oven offsets **Drift Run Facility** GLP On-screen Language

Optional Accessories

Enhanced Protection Pack Water proof power supply Splash Cover Printer package & Interface Cables Calibration oils AG Calibration Fluids

^oBrix and User Defined (100 scales configurable) 0-100 °Brix, 1.32 - 1.58 RI 0.1 °Brix, 0.0001 RO ± 0.1 °Brix, ± 0.0001 RO Up to 50 available from preprogramed standard scales ICUMSA, AG, None or User Defined Minimum 4 (Optional delay) 10°C below ambient to 70°C ±0.03°C $\pm 0.05^{\circ}C$ 2 x RS232, 1 x Parallel <90% RH 22-30



100 - 240V ~, 50-60Hz, 50mA

24 column / CVS for LIMS

Configurable (methods with limits or simple "mode" operation) SMART, none and delay Configurable to any value Configurable

Date/ time/ batch/ operator French, German, Spanish, English

Date of issue	29-03-17	Revision No.	001	Revised by	SB	
Authorised by	S. Britton	Document No.	S074	Page 1 of 2		



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Instrument Compliance	Conforms to ISO/IEC Guide 22 and EN 45014 CE Low Voltage Directive 72/23/EEC and the EMC Directive 89/336/EEC
Instrument Dimensions	
Nett Weight	5.4Kgs
DIM Weight (Packed)	6.0Kgs
Customs Tariff	90275000

FM300+ Refractometers

RFM300+ series refractometers are considered by many leading companies as the ultimate instrument for installation in demanding factory environments, as well as for use as a primary quality control tool. Since its original launch in 1992, over 5,000 models have been installed across the globe, and following a complete re-design in 2008, the RFM300+ series of refractometers still offers all the original design attributes but with a wider refractive index range, Peltier temperature control and a more versatile software structure. A shallow, easy-to-clean prism dish houses a single sapphire prism optical system protected by a sample presser that may also be used to instigate a measurement without the need to press the

read button. A large sampling area on the prism surface allows measurement of not only homogenous fluids like juices, sodas, sauces and edible oils, but also difficult to read samples like fruit pulps and industrial resins.

Intelligent software ensures rapid temperature response to changes in prism temperature, whilst the SMART temperature stability check makes sure that the result is displayed only when the sample is stable. A Methods system allows rapid configuration of instrument setup and provides limit checks against stored data as well as product-specific offsets and acid corrections. Over 700 readings may be stored within the instrument memory and the onscreen menu may be displayed in a number of different languages. The instrument is available in two formats, the most popular being the 2-decimal place RFM340+ refractometer, which, following improvements to the thermodynamic control system, now has an

increased measurement performance between 0-20°Brix and so reduces potential measurement error in the critical range covering finished products like the aforementioned juices and sodas. By improving the performance at the low end of the scale, users may now trim syrup dilution to the absolute minimum without the risk of

breaching manufacturing specifications.SG scales for sucrose are also common to the series. These scales may be used to express the relative density of pure sucrose solutions and, when used in conjunction with a product offset from within the Methods system, can express finished beverages as an equivalent SG. By doing so, contract packers of beverage products may now use a refractometer in situations where density °Brix or SG is dictated as the method of analysis, whilst retaining all the measurement advantages held by a refractometer. Additionally, all RFM300+ series refractometers have the ability to display the measured result in two scale formats such as a Brix value based on SG alongside the original refractive index measurement. Optional software is also available at point of order to allow use in an environment controlled by FDA regulation 21 CFR Part 11, as well as optional devices that allow use in wet and humid factory environments, offering ultimate protection under the worst of environmental conditions

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