

***Refractometers with Peltier
Temperature Control for
Food and other Industrial
Applications***



***Bellingham
+ Stanley***

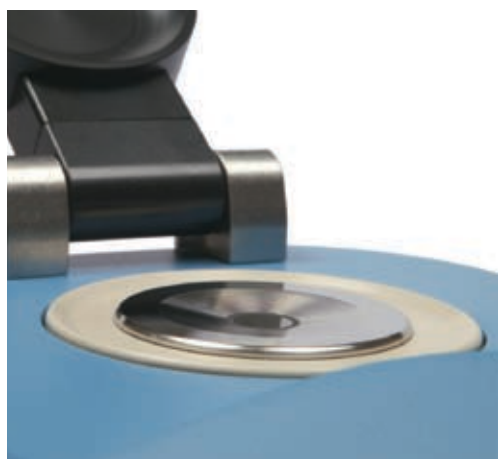
RFM300+ Refractometers

RFM300+ refractometers encompass attributes of their predecessors and also offer a wider refractive index range and Peltier temperature control. A shallow, easy to clean prism dish houses a new, 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 edible and mineral oils but also difficult to read samples like fruit pulps and industrial resins.

The instrument is available in two formats, the most popular being the 2-decimal place RFM340+. Intelligent software ensures rapid temperature response to change 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 on-screen menu may be displayed in a number of different languages.

Designed with the most vigorous environments in mind, the RFM300+ can be fitted with optional extras that allow use in wet and humid factory environments.

Specifications	RFM330+	RFM340+
Scales		
Refractive Index	1.32 – 1.58	1.32 – 1.58
Sugar (°Brix)	0-100	0-100
User-defined (100 scales - configurable)	Yes	Yes
Resolution		
Refractive Index	0.0001	0.00001
Sugar (°Brix)	0.1	0.01
Accuracy		
Refractive Index	±0.0001	±0.00004
Sugar (°Brix)	±0.1	±0.03
Presser Type	Polyacetal	Polyacetal
Reading Time	Minimum 4 seconds	
Measuring Temperature Range	10 °C below ambient to 70 °C	
Temperature Sensor Accuracy	± 0.03 °C	
Sample Temperature Stability	± 0.05 °C	
Temperature Compensation		
Sucrose (°Brix)	5 – 70 °C	
AG Fluids	Simple coefficient (units/ °C) or polynomial function	
User-defined		
Temperature Stability Checks	Independently selectable by method	
Ambient Humidity Range	<90% RH	



- High accuracy
- Wide range
- Peltier temperature control
- Easy clean prism
- Water resistant housing
- Presser 'Read' function
- Methods system (100+)
- Over 700 stored readings

Special Models

In order to meet specific customer requirements, special adaptations to RFM300+ series refractometers may be possible. Contact B+S for details.

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Physical Specifications	
Prism	Artificial Sapphire (Single). 12mm sample area diameter
Prism Dish	316 Stainless Steel / PEEK
Prism Seal	Silicon/Resin
Interfaces	1 Parallel (printer), 2 x Serial (RS232)
Sample Illumination	Light Emitting Diode (life 100,000hr +) 589nm
Temperature Control	Peltier
Power Supply	External 100-240V, 50-60Hz. Supplied with instrument

Order Code	Description
22-30	RFM330+ Refractometer incl. standard power supply and instructions
22-40	RFM340+ Refractometer incl. standard power supply and instructions
22-80	Enhanced Protection Pack
55-250	Waterproof Power Supply Unit
26-155	Splash Cover