

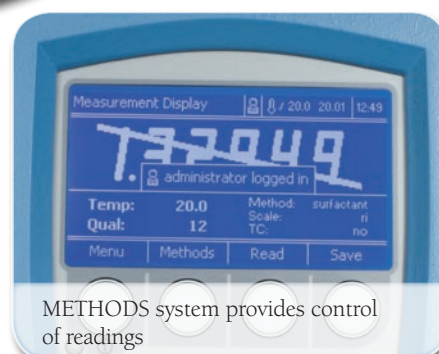
**Refractometers with Peltier Temperature Control for Petrochemical, Pharmaceutical and Other Applications Requiring a Wide Measuring Range.**



Shallow prism dish for easy cleaning



RFID tag for rapid clearance of users



METHODS system provides control of readings



**Bellingham  
+ Stanley**

## RFM900 Refractometers

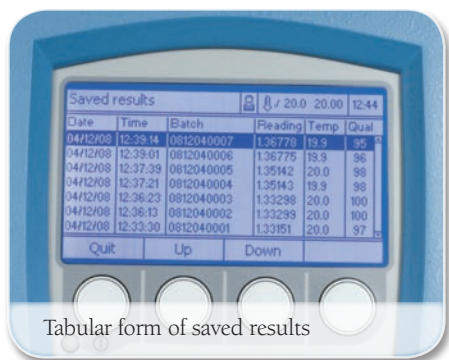
Designed as a replacement for the RFM800 series, the new RFM900 series of refractometers combine latest opto-electronic principles with durability and ease of use.

RFM900 refractometers feature RFID (radio frequency identification) that allows users to identify themselves by simply swiping a tag across the top of the instrument to enable measurement and in certain cases, access to the configuration menu.

A new low profile sample dish and non-contact presser makes sample application and cleaning much easier than with its predecessor. Readings can be taken automatically on the replacement of the presser and up to 700 stored results can be easily viewed in tabular form on the instrument display. Peltier temperature control and intelligent temperature management ensures readings are only taken when the sample and refractometer temperatures are both stable.

The instruments conform to a number of industry measurement standards and offer operational features that allow use in an environment controlled by FDA regulation 21 CFR Part 11. The use of a Kalrez® gasket and sapphire prism facilitates placement in the harshest measurement environments including those in the pharmaceutical, petrochemical, aroma, flavour, fragrance and other high RI sectors.

Flowcell versions are available on request.



Tabular form of saved results



Moisture resistant services panel & instrument housing

- Wide RI range
- Peltier temperature control
- SMART temperature stability
- RFID user identity
- Easy clean prism
- Auto read function
- 700 stored results
- Tabular form of saved results
- Display language options
- Barcode reader facility

Conforms to GLP, OIML; ASTM D 5006, 1747, 2140, 1218; USP/EP/BP; and operational requirements of FDA regulation 21 CFR Part 11.

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| Specifications               | RFM960   | RFM970      |
|------------------------------|--|-------------|
| Scales                       |  |             |
| Refractive Index             | 1.30 – 1.70  | 1.30 – 1.70 |
| Sugar (°Brix)                | 0-100  | 0-100       |
| User-defined                 | Yes – 100  | Yes – 100   |
| Resolution                   |  |             |
| Refractive Index             | 0.0001   | 0.00001     |
| Sugar (°Brix)                | 0.1  | 0.01        |
| Accuracy                     |  |             |
| Refractive Index             | ±0.0001  | ±0.00002    |
| Sugar (°Brix)                | ±0.1   | ±0.02       |
| Presser Type                 | Polyacetal   | Polyacetal  |
| Temperature Compensation     |  |             |
| Sucrose (°Brix)              | 5 – 80 °C  |             |
| AG Fluids                    | Simple coefficient (units/ °C) or polynomial function                    |             |
| User-defined                 |  |             |
| Reading Time                 | Minimum 4 seconds  |             |
| Temperature Stability Checks | None/delay time/repeatability/Smart (independently selectable by Method) |             |
| Measuring Temperature Range  | 0 °C or 10 °C below ambient whichever is the greater to 80 °C            |             |
| Temperature Sensor Accuracy  | ± 0.03 °C  |             |
| Sample Temperature Stability | ± 0.05 °C  |             |
| Power Supply                 | External 100-240V, 50-60Hz. Supplied with instrument                     |             |

### Physical Specifications

|                     |  |
|---------------------|--|
| Prism               | Artificial Sapphire                      |
| Prism Dish          | 316 Stainless Steel / PEEK               |
| Prism Seal          | Kalrez®                                  |
| Interfaces          | 1 Parallel (printer), 2 x Serial (RS232) |
| Sample Illumination | Light Emitting Diode 589nm               |
| Temperature Control | Peltier                                  |

| Order Code | Description  |
|------------|--|
| 22-60      | RFM960 Refractometer including power supply and instructions |
| 22-70      | RFM970 Refractometer including power supply and instructions |
| 22-80      | Enhanced Protection Pack                                     |
| 55-250     | Waterproof Power Supply Unit                                 |
| 26-155     | Splash Cover   |

Bellingham + Stanley Ltd. pursue a policy of continuous product development and improvement and, as such, information given on this Data Sheet may be updated or withdrawn without notice.