

- L** LABORATORY
- P** PROCESS
- S** SOFTWARE
- A** AUTOMATION



VariRef Series

Refractometer
The next generation



| SPECIFICATIONS | VariRef C | VariRef B | VariRef A |
|----------------------------------|--|----------------------------------|---|
| Measuring scales | Refractive Index (RI), Sucrose (% Brix) Standard scales included, freely definable scales | | Refractive Index (RI), Sucrose (% Brix), USG |
| Measuring range | 1.3200 - 1.5800 RI / 100% Brix | 1.29000 - 1.58000 RI / 100% Brix | 1.320000 - 1.580000 RI / 100% Brix |
| Resolution | 0.0001 RI / 0.05% Brix | 0.00001 RI / 0.01% Brix | 0.000001 RI / 0.001% Brix |
| Precision | ± 0,0001 RI* / ± 0.05% Brix* | ± 0,00002 RI* / ± 0.02% Brix* | ± 0,00002 RI* / ± 0.02% Brix* |
| Repeatability | ± 0.0001 RI / ± 0.05% Brix | ± 0.00002 RI / ± 0.02% Brix | ± 0.000005 RI / ± 0.006% Brix |
| Ambient temperature | | + 10 °C to + 40 °C | |
| Temperature measurement | | Pt 1000 sensor | |
| Temperature range | 5 °C to 80 °C | 5°C to 100 °C | 20 °C (others upon request) |
| Temperature resolution | | 0.01 °C | |
| Temperature precision | | ± 0.03 °C * | |
| Measurement mode | Single sample or flow through measurement (with optional compartment door) | | |
| Prism | Sapphire | Sapphire / YAG | Sapphire |
| Light source / wavelength | LED, interference filter 589 nm | | |
| Display | None, 5" or 7" Touchscreen, 800 x 480 Pixel | | |
| Operation | Touchscreen**, Keyboard***, Mouse***, Barcode Reader***, Remote via PC/Tablet/Smartphone*** | | |
| Interfaces | Ethernet 10/100/1000, RS232, SH connector, USB, WLAN**, Modbus**, Canbus**, Profibus** | | |
| Conformity | International Pharmacopoeia, ASTM, AOAC, DIN, FDA, ICUMSA and others | | |
| Highlights | Modularity; user friendliness; fast temperature control; easy cleaning; special covered version; the self-checking capabilities for cleanliness, environment temperature effects, calibration and more result in a virtually maintenance free product, 21 CFR part 11 ready; ELN; LIMS ready | | |
| Dimensions | With Display: 310 x 220 x 235 mm (W x D x H) / Without Display: 310 x 220 x 150 mm (W x D x H) | | |

* Standard conditions (589 nm, $t_s=20^\circ\text{C}$, $t_A=23^\circ\text{C}$)
 ** Optional
 *** Not included in delivery

Combining over 150 years of experience with the endless strive for innovation

The VariRef possesses the well-established flat and easy to clean Schmidt + Haensch sample room. When dealing with sticky, hard to clean or hazardous materials we offer you special cover versions to ensure proper sampling.

The new double isolated peltier systems allows fastest and precise temperature control. The newly developed ATC (Ambient T-Control) takes



**SCHMIDT
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innovators by tradition since 1864

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