

**L** LABORATORY

**P** PROCESS

**S** SOFTWARE

**A** AUTOMATION



**SCHMIDT  
HAENSCH**  
innovators by tradition since 1864

# 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	1.2900 - 1.5800 RI / 100% Brix	1.29000 - 1.58000 RI / 100% Brix 1.32000 - 1.70000 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 or 7" Touchscreen, 800 x 480 Pixel		
Operation	Touchscreen**, Keyboard***, Mouse***, Barcode Reader***, Remote via PC/Tablet/Smartphone with Aquisys3 software***		
Interfaces	Ethernet 10/100/1000, RS232, SH connector, USB, WLAN**, Modbus**, Canbus**, Profibus**		
Conformity	International Pharmacopoea, ASTM, AOAC, DIN, FDA, ICUMSA and others		
Highlights	Modularity; user friendliness; fast temperature control; easy cleaning; variety of complete special sample room doors, e.g. for single or flow through measurements or for solid samples; the self-checking capabilities for cleanliness, environment temperature effects, calibration and more result in a virtually maintenance free product, 21 CFR part 11 conform; ELN; LIMS ready		

\* Standard conditions (589 nm,  $t_r=20^{\circ}\text{C}$ ,  $t_s=23^{\circ}\text{C}$ )  
 \*\* Optional  
 \*\*\* PC/Tablet/Smartphone 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 a variety of sample room doors to ensure proper sampling.

The new double isolated peltier systems allows **fastest and precise temperature control**. The newly developed **ATC** (Ambient T-Control) takes temperature variations of the ambience of the instrument into account as well.

