

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

# VariRef Series

Refractometer  
The next generation



SPECIFICATIONS	VariRef A	VariRef E
Measuring scales	Refractive Index (RI), Sucrose (%Brix) Standard scales included	
Measuring range	1.29000 - 1.58000 RI / 100% Brix	1.32000 - 1.70000 RI / 100% Brix
Resolution	0.00001 RI / 0.01% Brix	0.00001 RI / 0.01% Brix
Precision	± 0,00002 RI* / ± 0.02% Brix*	± 0,00002 RI* / ± 0.02% Brix*
Reproducibility	± 0.00001 RI / ± 0.01% Brix	± 0.00001 RI / ± 0.01% Brix
Ambient temperature	+ 10° to + 40°C	
Temperature measurement	Pt100 sensor for measurement of sample temperature placed inside the prism	
Technical data Peltier-thermostat	Temperature control prism and sample by build-in solid state Peltier-thermostat	
Temperature range	+ 5°C to + 80°C	+ 5°C to + 100°C
Resolution	0.01°C	
Precision	± 0.03°C	
Reproducibility	± 0.02°C	
Measurement mode	Single sample or flow through measurement	
Prism	Sapphire	YAG
Light source / wavelength	LED, interference filter 589 nm	
Display	5" or 7" Touchscreen, 800 x 480 Pixel, 16 Bit colors	
Operation	Touchscreen, keyboard**, mouse**, barcode reader**, remote via PC/Browser**	
Interfaces	RS232, SH connector, USB, Ethernet, WLAN** and more	
Conformity	International Pharmacopoea, 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; 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, 20°C)  
\*\* Optional

## 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 temperature variations of the ambience of the instrument into account as well.

