



WINE REFRACTOMETERS

- Grape growers
- Wine cooperatives (sorting grape must)
- Wineries (purchasing grape must)
- Buyers for grape must

The Wine Refractometers are used for measuring grape must concentrations.

WM-7 Cat.No.3415

DIGITAL WINE REFRACTOMETER



Palette

PAL-79S Cat.No.4479

PAL-80S Cat.No.4480

PAL-83S Cat.No.4483

PAL-84S Cat.No.4484

PAL-86S Cat.No.4486

PAL-87S Cat.No.4487

DIGITAL HAND-HELD "POCKET" WINE REFRACTOMETERS



Pocket

The WM-7, Portable Digital Wine Refractometer, features 7 scales and is developed to measure the concentration of grape must, easily, quickly and accurately. The measurement accuracy is upgraded to Brix $\pm 0.1\%$

PAL's wine series are light and compact, it is portable for both indoor use and outdoors. You can place it in your pocket or hang it from your neck by using a strap. 6 models are available.

Scales	Measurement range	Minimum indication	Measurement accuracy
① Brix (determined by ICUMSA)	0.0 to 45.0%	0.1%	$\pm 0.1\%$
② T.A. 1990 (Titre Alcoometrique established in 1990)	0.0 to 26.0%	0.1%	$\pm 0.2\%$
③ T.A. 1971 (Titre Alcoometrique established in 1971)	0.0 to 25.0%	0.1%	$\pm 0.2\%$
④ Oe (GER) (Oechsle used in Germany)	0 to 240°	1°	$\pm 1^\circ$
⑤ Oe (Oechsle)	0 to 240°	1°	$\pm 1^\circ$
⑥ KMW (or Babo)	0.0 to 40.0°	0.1°	$\pm 0.2^\circ$
⑦ Baume	0.0 to 21.0°	0.1°	$\pm 0.2^\circ$
Measurement temperature	5 to 40°C (Automatic Temperature Compensation)		
Ambient temperature	5 to 40°C		
Measurement time	3 seconds		
Power supply	006P Dry battery (9V)		
International protection class	IP64 Water resistant		
Dimensions & Weight	17 × 9 × 4cm, 300g		

Model	Cat.No.	Scale	Measurement range	Minimum indication	Measurement accuracy
PAL-79S	4479	T.A. 1990	0.0 to 26.0%	0.1%	$\pm 0.2\%$
PAL-80S	4480	T.A. 1971	0.0 to 25.0%	0.1%	$\pm 0.2\%$
PAL-83S	4483	KMW (or Babo)	0.0 to 40.0°	0.1°	$\pm 0.2^\circ$
PAL-84S	4484	Baume	0.0 to 21.0°	0.1°	$\pm 0.2^\circ$
PAL-86S	4486	Oe (GER) Brix (Dual Scale)	0 to 240° 0.0 to 53.0%	1° 0.1%	$\pm 1^\circ$ $\pm 0.2\%$
PAL-87S	4487	Oe (Oechsle) Brix (Dual Scale)	0 to 240° 0.0 to 53.0%	1° 0.1%	$\pm 1^\circ$ $\pm 0.2\%$
Measurement temperature	10 to 40°C (Automatic Temperature Compensation)				
Ambient temperature	10 to 40°C				
Measurement time	3 seconds				
Power supply	2 × AAA Batteries				
International protection class	IP65 Water resistant				
Dimensions & Weight	5.5 × 3.1 × 10.9cm, 100g				

