

Digital Hand-held "Pocket" Refractometer

Pocket PAL-2
Cat.No.3820
Brix 45.0~93.0%

Pocket PAL-3
Cat.No.3830
Brix 0.0~93.0%

The Digital Hand-held "Pocket" Refractometer PAL-2, PAL-3 Will Change the Way of Measuring Your Sample.

Everyone is talking about the new "Pocket" as featured on recent TV programs and Magazines



Always clean and shiny - can be easily rinsed under running water.

Feature

- Calibration with water only
- Extremely water resistant (IP65)
- Light & Compact, 100g
- Revolutionary new feature E.L.I.*
- Automatic Temperature Compensation (ATC)
- Measurement in 3 seconds
- Ergonomically designed for one-handed operation
- Equipped with a strap holder option
- Convenient storage case

* External Light Interference (E.L.I.)-Patent Pending

When intense light penetrates the prism of a digital refractometer, the light waves interfere with the sensor resulting in inaccurate readings.

To ensure accurate measurement results each time, the Pocket is programmed with the E.L.I. function to display the warning message "nnn" when intense direct light is detected. Forming a habit of shading the sample stage with your hand and re-pressing the START key (when the warning message from the E.L.I. function is displayed) will ensure accurate measurement results each time.

Specifications

- Measurement Range : **PAL-2** Brix 45.0~93.0%
PAL-3 Brix 0.0~93.0%
- Resolution : Brix 0.1%
- Measurement Accuracy : Brix $\pm 0.2\%$
- Measurement Temperature : 10~60°C
- Automatic Temperature Compensation
(Boiled samples over 100°C can be measured under specified conditions. Please contact ATAGO for further details.)
- Power Supply : 2 x AAA Batteries
- International Protection Class : IP65 Water Resistant
- Dimensions and Weight : 55 (W) × 31 (D) × 109 (H) mm, 100g

Application

- At fruit and vegetable farming orchards
- At beverage factories... fruit juices, coffee, soft drinks, etc.
juice concentrates, etc.
- At food factories... soy sauce, various sauces, etc.
syrops, jellies, etc.
seasoning, soups
jams, marmalade, honey, etc.
condensed milk, etc.
- At fruit and vegetable markets or supermarkets
- At restaurants or food shops
- In Junior High, High Schools, or Universities as a course material

PAL-2 High Brix	PAL-3 Full Range
	○
	○
○	○
	○
○	○
	○
○	○
○	○
	○
○	○
○	○



ATAGO

The PAL series can measure high temperature samples during the heating or cooking process. (The measured Brix value will stabilize after taking a few repeated measurements.)

Digital Hand-held "Pocket" Refractometer (Special Scale)



Over 80 Scales Available!

ATAGO released **80 NEW scales** for the Digital Hand-held "Pocket" Refractometer PAL series!! Our wide variety of scales enables you to choose the specific model for your needs!! Please contact us for more details.

Soy milk, Bittern (Magnesium chloride)

Cat. No.	Model name	Scale
4427	PAL-27S	Soy milk
4443	PAL-43S	Bittern (Magnesium chloride)

Chinese noodle soup (Double scale)

Cat. No.	Model name	Scale
4496	PAL-96S	Chinese noodle soup Baume of Kansui

Honey

Cat. No.	Model name	Scale
4422	PAL-22S	Honey moisture

Salinity

Cat. No.	Model name	Scale
4403	PAL-03S	Sodium chloride (Concentration)
4404	PAL-04S	Sodium chloride (S.G.)
4405	PAL-05S	Sodium chloride (Baume)

Sea water

Cat. No.	Model name	Scale
4406	PAL-06S	Seawater (Concentration)
4407	PAL-07S	Seawater (S.G.)
4408	PAL-08S	Seawater (Baume)

Food additives, Ingredients

Cat. No.	Model name	Scale
4429	PAL-29S	Citric acid
4430	PAL-30S	Acetic acid
4432	PAL-32S	Phosphoric acid
4464	PAL-64S	Sodium bicarbonate
4465	PAL-65S	Sodium tartrate
4470	PAL-70S	Potassium phosphate

Sugars

Cat. No.	Model name	Scale
4412	PAL-12S	Dextran
4414	PAL-14S	Fructose
4415	PAL-15S	Glucose
4416	PAL-16S	High Fructose Corn Syrup HFCS-42
4417	PAL-17S	High Fructose Corn Syrup HFCS-55
4418	PAL-18S	Inverted sugar
4419	PAL-19S	Lactose
4420	PAL-20S	Maltose

Alcohol liquid

Cat. No.	Model name	Scale
4434	PAL-34S	Ethyl alcohol
4436	PAL-36S	Methyl alcohol
4437	PAL-37S	Isopropyl alcohol
4485	PAL-85S	Polyvinyl alcohol

Pharmaceutical reagents

Cat. No.	Model name	Scale
4412	PAL-12S	Dextran
4413	PAL-13S	Creatine
4423	PAL-23S	Glycerin (Low concentration)
4424	PAL-24S	Glycerin (High concentration)
4425	PAL-25S	Inulin
4426	PAL-26S	Mannitol
4431	PAL-31S	Formic acid
4432	PAL-32S	Phosphoric acid
4451	PAL-51S	Sodium bromide
4455	PAL-55S	Magnesium sulfate
4464	PAL-64S	Sodium bicarbonate
4465	PAL-65S	Sodium tartrate
4466	PAL-66S	Potassium oxalate
4468	PAL-68S	Potassium dichromate
4470	PAL-70S	Potassium phosphate
4472	PAL-72S	Sodium tungstate

Wine

Cat. No.	Model name	Scale
4479	PAL-79S	T.A. 1990
4480	PAL-80S	T.A. 1971
4481	PAL-81S	Oe (Ger)
4482	PAL-82S	Oe (Oechsle)
4483	PAL-83S	KMW (or Babo)
4484	PAL-84S	Baume

Clinical inspection, Test

Cat. No.	Model name	Scale
4442	PAL-42S	Cesium chloride
4453	PAL-53S	Copper sulfate (Concentration)
4454	PAL-54S	Copper sulfate (S.G.)

Sterilization, Bleaching

Cat. No.	Model name	Scale
4439	PAL-39S	Hydrogen peroxide

Alkaline liquid

Cat. No.	Model name	Scale
4440	PAL-40S	Sodium hydroxide

Artificial leather, Fabric

Cat. No.	Model name	Scale
4438	PAL-38S	Dimethylformamide

Paste

Cat. No.	Model name	Scale
4421	PAL-21S	Dextrin

Snow-melting agent

Cat. No.	Model name	Scale
4403	PAL-03S	Snow-melting agent (Sodium chloride)
4441	PAL-41S	Snow-melting agent (Calcium chloride)
4443	PAL-43S	Snow-melting agent (Magnesium chloride)

Coolant (Double scale)

Cat. No.	Model name	Scale
4488	PAL-88S	Propylene glycol Freezing point of Propylene glycol (°C)
4489	PAL-89S	Propylene glycol Freezing point of Propylene glycol (°F)
4491	PAL-91S	Ethylene glycol Freezing point of Ethylene glycol (°C)
4492	PAL-92S	Ethylene glycol Freezing point of Ethylene glycol (°F)

Chemical products

Cat. No.	Model name	Scale
4423	PAL-23S	Glycerin (Low concentration)
4424	PAL-24S	Glycerin (High concentration)
4430	PAL-30S	Acetic acid
4431	PAL-31S	Formic acid
4432	PAL-32S	Phosphoric acid
4444	PAL-44S	Lithium chloride
4445	PAL-45S	Barium chloride
4446	PAL-46S	Cobalt chloride
4447	PAL-47S	Ferric chloride
4448	PAL-48S	Strontium chloride
4449	PAL-49S	Potassium chloride
4450	PAL-50S	Potassium bromide
4451	PAL-51S	Sodium bromide
4452	PAL-52S	Potassium iodide
4453	PAL-53S	Copper sulfate (Concentration)
4454	PAL-54S	Copper sulfate (S.G.)
4455	PAL-55S	Magnesium sulfate
4456	PAL-56S	Potassium sulfate
4457	PAL-57S	Nickel sulfate
4458	PAL-58S	Sodium nitrate
4459	PAL-59S	Zinc sulfate
4460	PAL-60S	Silver nitrate
4461	PAL-61S	Sodium nitrate
4462	PAL-62S	Potassium carbonate
4463	PAL-63S	Sodium carbonate
4464	PAL-64S	Sodium bicarbonate
4467	PAL-67S	Potassium chromate
4468	PAL-68S	Potassium dichromate
4469	PAL-69S	Sodium thiosulfate
4470	PAL-70S	Potassium phosphate
4471	PAL-71S	Sodium molybdate
4472	PAL-72S	Sodium tungstate

CE HACCP G.M.P. G.L.P.

ATAGO products are acknowledged by
HACCP, G.M.P. and G.L.P. systems.

* Specifications and design are subject to change without notice.

ATAGO CO., LTD.

Main Office: 32-10, Honcho, Itabashi-ku, Tokyo 173-0001, Japan
TEL: 81-3-3964-6156 FAX: 81-3-3964-6137
export@atago.net http://www.atago.net/

ATAGO U.S.A., Inc.

12001 Bel-Red Road, Suite 101 Bellevue, WA 98005
TEL: 1-425-637-2107 FAX: 1-425-637-2110
customerservice@atago-usa.com

