

Digital Refractometer (Optical Refraction Method) Palette Series

Palette



The Palette α - high functionality in a compact size body

- $\pm 0.1\%$ (Brix) accuracy.
- Programmable user scales enable control of various liquid concentrations.



PR-32α Cat.No.3405

PR-101α Cat.No.3442

PR-201α Cat.No.3452

PR-301α Cat.No.3462

ATAGO®

Palette

The continuing evolution of the Palette — The Debut of the Palette α

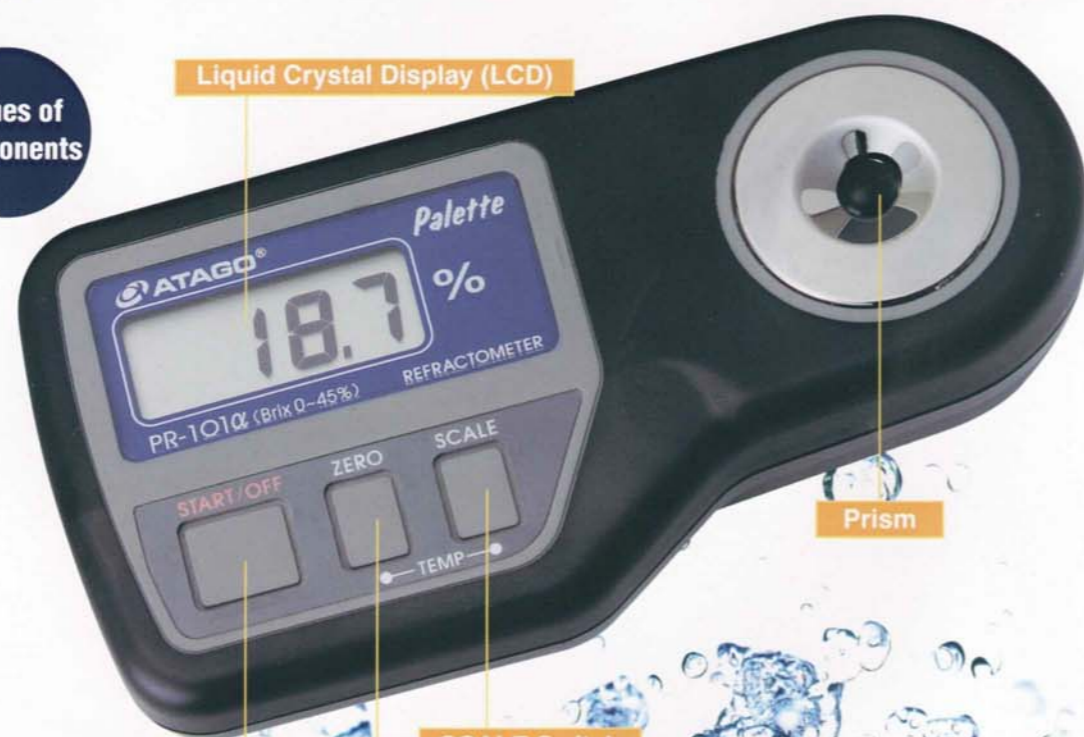
The Palette α series is the ultimate compact instrument which is the result of years of proven reliable performance, ease of operation and the functionality of design.

Measures concentration of solutions with a light beam



Names of Components

Liquid Crystal Display (LCD)



START/OFF Switch

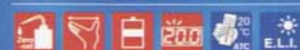
SCALE Switch

ZERO Setting Switch

Prism



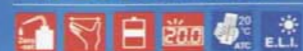
PR-32 α Cat.No.3405



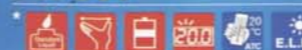
PR-101 α Cat.No.3442



PR-201 α Cat.No.3452



PR-301 α Cat.No.3462



Four models of the Palette α are available for your different measurement samples.

*Calibration with the Standard Liquid LG.

Measurement Method

Sample size is Just
1 Drop!

Measurement time is Just
3 seconds!

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

When intense light penetrates the prism of a digital refractometer, the light waves may interfere with the sensor resulting in inaccurate readings. To ensure accurate measurement results each time, the Palette α 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/OFF Switch (when the warning message from the E.L.I. function is displayed) will ensure accurate measurement results each time.



1 Apply 1 drop of sample solution onto the prism surface.



2 Press the START/OFF Switch.



3 Brix (%) value displayed in 3 seconds!

Main Features

Accuracy improved to $\pm 0.1\%$

NEW!

The conventional measurement accuracy, $\pm 0.2\%$, is increased to $\pm 0.1\%$. The highest accuracy available in a compact model.

External-light-Interference (E.L.I.)*

NEW!

Conventionally, digital optical instruments have the potential to display incorrect measurement values if sampling is performed near a window or outdoors where lighting may be too intense. The new E.L.I. technology provides security under these conditions to ensure accurate measurements.

Convenient temperature display

NEW!

A temperature display function has been added. The temperature is displayed by simply pressing a switch.

User scale feature

NEW!

The user scale function has been added. Concentrations of various samples can be displayed by setting up a coefficient. Three separate user scales can be entered.

Two-year warranty

NEW!

The warranty term was one year, but it extended to two years for Palette α under some conditions: Ask ATAGO for detailed terms and conditions.

Automatic Temperature Compensation (ATC) function

With ATC, there is no need to worry about the measurement temperature.

Large, easy to read display

The large-sized liquid crystal panel makes it easy to read the measured result.

Main Applications

	PR-32 α	PR-101 α	PR-201 α	PR-301 α
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.			○	○
syrrups, 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	○	○	○	○

	PR-32 α	PR-101 α	PR-201 α	PR-301 α
Cat.No.	3405	3442	3452	3462
Measurement Range	Brix0.0~32.0%	Brix0.0~45.0%	Brix0.0~60.0%	Brix45.0~90.0%
Minimum Indication	Brix 0.1%			
Measurement Accuracy	Brix \pm 0.1% (5~40°C)		Brix \pm 0.1% (10~40°C)	Brix \pm 0.1% (10~30°C)
Measurement Temperature	5~40°C Automatic Temperature Compensation		10~40°C Automatic Temperature Compensation	
Ambient Temperature	5~40°C		10~40°C	
Sample Volume	0.1ml or more			
Measurement Time	3 seconds (approximately)			
Power Supply	006P dry battery (9V)			
International Protection Class	IP64			
Dimensions and Weight	17 (W) \times 9 (D) \times 4 (H) cm, 300g			

Certification

In accordance with ISO Quality Management Systems, ATAGO can provide calibration and certification for any ATAGO refractometer. The following documents will be issued (for a service fee):

1. Calibration Certificate
2. Traceability System Diagram
3. Traceability Certificate

CALIBRATION CERTIFICATE

Product: Digital Refractometer
Model: PR-101 α

Serial Number: _____
Date of Calibration: _____
Calibrated by: _____
Checked by: _____

Item	Standard Value	Measured Value	Measurement Error
1. Brix	10.00%	10.00%	0.00%
2. Temp	20.00°C	20.00°C	0.00°C

ATAGO CO., LTD.

Digital Salt Meter ES-421

- Measurement Range:** 0.00 to 10.0% (100g) of salt concentration
- Minimum Indication:** 0.01% for salt concentration of 0.00 to 2.99%
0.1% for salt concentration of 3.0 to 10.0%
- Measurement Accuracy:** Displayed value \pm 0.05% (for salt concentration of 0.00 to 1.00%)
Relative precision \pm less than 5% (for salt concentration of 1.00 to 10.0%)
- Power Supply:** 006P dry battery (9V)
- Dimensions and Weight:** 17(W) \times 9(D) \times 4(H) cm, 300g



ES-421

Measurement Salt %

EXPLANATION OF ICONS

Icons for functions, specifications and scales have been added to this catalog.

- Compact and easy to carry
- Portable
- Leicht und einfach zu tragen
- Calibrazione con liquidi standard esclusivi
- Compacto y fácil de llevar
- 輕巧易於攜帶
- Calibration with water
- Calibration 1 point* sur eau distillée
- Kalibrierung mit Wasser
- Calibrazione con acqua
- Calibración con agua
- 用水歸零
- Calibration with exclusive standard liquid
- Calibration 1 point sur solution standard
- Kalibrierung mit speziellem Standard
- Calibration 1 point sur solution standard
- Calibración con patrones líquidos especiales
- 使用專屬標準液歸零
- Battery operated
- Alimentation par pile
- Batteriebetrieben
- Alimentazione a batteria
- Funcionamiento con batería
- 使用電池操作
- Digital display
- Affichage numérique
- Digital Anzeige
- Display digitale
- Pantalla digital
- 數字顯示
- Automatic temperature compensation
- Compensation automatique de température
- Automatische Temperaturkompensation
- Compensazione automatica della temperatura
- Compensación de automática de temperatura
- 自動溫度補償
- External Light Interference
- Interférence de la lumière externe
- Äußere Lichteinflüsse
- Interferenza della luce esterna
- Luz de Interferencia Externa
- 外部光線干涉

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

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* Specifications and design are subject to change without notice.