



The Ultimate Hand-Held Refractometer  
Unsurpassed in Function, Operation, and Design

# MASTER

MASTER-SERIES REFRACTOMETER

(Water Resistant & Automatic Temperature Compensation)

MASTER- $\alpha$  series ( $\alpha$  · 2 $\alpha$  · 3 $\alpha$  · 4 $\alpha$  · 53 $\alpha$ )

MASTER-H series (50H · 80H · 93H · 100H)

(Automatic Temperature Compensation)

MASTER-T series (T · 2T · 3T · 4T · 53T)

MASTER-M series (M · 2M · 3M · 4M · 53M)

MASTER-RI

**ALL NEW DESIGN**



Design Registration No.000379326-0001, 000379326-0002 (EU)  
ZL 2005 3 0116403.4.5 (China), D111526 (Taiwan)  
1255763, 1255764, 1255765, 1255766, 1255767 (Japan)  
Registration pending in U.S.A. and all other countries around the world.

**About the Trade Mark:**

Year 2005-ATAGO was established 65 years ago and we have been developing, manufacturing, and marketing Refractometers based on our in-depth study of optics. This year we have released our NEW Hand-Held Refractometer series, the "MASTER" to support and meet our customer's needs. The NEW "MASTER" series is a fitting name to match its ultimate performance. The trade mark, "光" is the Japanese Kanji which means "light". The decision to use this Kanji as a trade mark for the MASTER series is to emphasize that this product was designed and manufactured in Japan. With the multitude of imitation products out in the market today, ATAGO is maintaining our identity as the master of manufacturing quality instruments. We, ATAGO, would like to be your business partner and to be the "light" to continue towards a bright future together.



**Hand-held Refractometer**



**Sleek Design**

Streamlined body with a comfortable grip and rich carbon/fiber texture

**ATC function**

The Automatic Temperature Compensation feature allows for accurate measurements anytime, anywhere regardless of temperature

**Water-resistant**

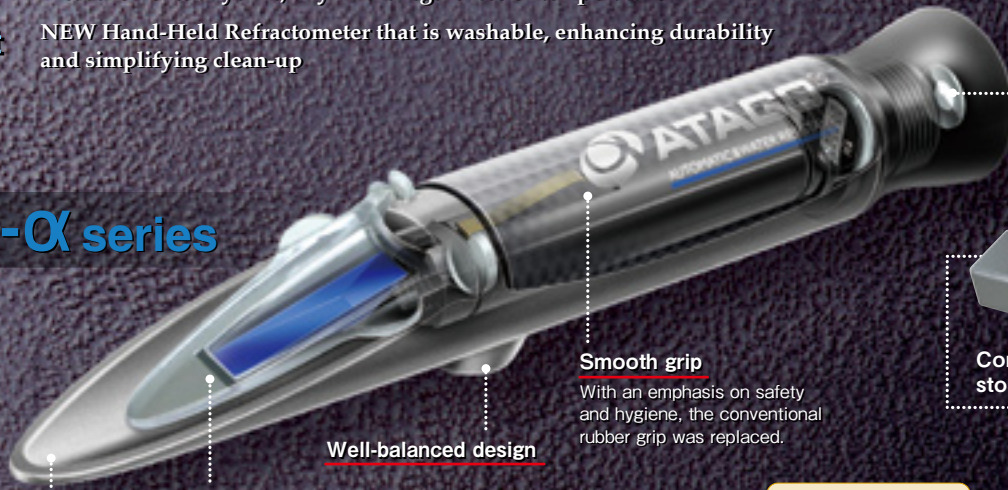
(MASTER- $\alpha$  series · H series)

NEW Hand-Held Refractometer that is washable, enhancing durability and simplifying clean-up



Patent pending

# MASTER- $\alpha$ series



Bright Blue Scale is easy to read!



Convenient storage box

Spoon shape

Well-balanced design

Smooth grip  
With an emphasis on safety and hygiene, the conventional rubber grip was replaced.

Optional: Daylight plate for small volume samplings (RE-2311-52M)

### Automatic Sample Distribution (ASD)

New prism housing design allows for a sample to cover the prism without having to lift the daylight plate! This design will allow for fast & easy measurements.



<b>Applications</b>	<b>Food</b>	fruit juice / soft drinks / carbonated beverage / soup / concentrated juice / soy sauce / other sauces / jelly honey / syrup / jam / condensed milk / etc.
	<b>Industrial</b>	Water-soluble cutting oils / washing liquids / coolants / etc.

Automatic Temperature Compensation & Water Resistant							
	MASTER- $\alpha$	MASTER-2 $\alpha$	MASTER-3 $\alpha$	MASTER-4 $\alpha$	MASTER-53 $\alpha$	MASTER-10 $\alpha$	MASTER-20 $\alpha$
Cat.No.	2311	2321	2331	2341	2351	2371	2381
Scale range	Brix 0.0~33.0%	Brix 28.0~62.0%	Brix 58.0~90.0%	Brix 45.0~82.0%	Brix 0.0~53.0%	Brix 0.0~10.0%	Brix 0.0~20.0%
Minimum Scale	Brix 0.2%	Brix 0.2%	Brix 0.2%	Brix 0.2%	Brix 0.5%	Brix 0.1%	Brix 0.1%
Accuracy	Brix $\pm$ 0.2% (10~30°C)	Brix $\pm$ 0.2% (10~40°C)	Brix $\pm$ 0.2% (10~40°C)	Brix $\pm$ 0.5% (10~40°C)	Brix $\pm$ 0.5% (10~30°C)	Brix $\pm$ 0.2% (10~30°C)	Brix $\pm$ 0.1%
Repeatability	Brix $\pm$ 0.1%	Brix $\pm$ 0.1%	Brix $\pm$ 0.1%	Brix $\pm$ 0.1%	Brix $\pm$ 0.25%	Brix $\pm$ 0.1%	Brix $\pm$ 0.1%
International Protection Class	IP65 Dust-tight and protects against water jets (except for eyepiece).						
Size & Weight	3.3x3.3x20.4cm,160g		3.3x3.3x16.8cm,120g			3.3x3.3x20.4cm,160g	

## Water Resistant (IP65)

(MASTER- $\alpha$  series · H series)



Can be washed under running water.

Automatic Temperature Compensation							
	MASTER-T	MASTER-2T	MASTER-3T	MASTER-4T	MASTER-53T	MASTER-10T	MASTER-20T
Cat.No.	2312	2322	2332	2342	2352	2372	2382
Scale range	Brix 0.0~33.0%	Brix 28.0~62.0%	Brix 58.0~90.0%	Brix 45.0~82.0%	Brix 0.0~53.0%	Brix 0.0~10.0%	Brix 0.0~20.0%
Minimum Scale	Brix 0.2%	Brix 0.2%	Brix 0.2%	Brix 0.2%	Brix 0.5%	Brix 0.1%	Brix 0.1%
Accuracy	Brix $\pm$ 0.2% (10~30°C)	Brix $\pm$ 0.2% (10~40°C)	Brix $\pm$ 0.2% (10~40°C)	Brix $\pm$ 0.2% (10~40°C)	Brix $\pm$ 0.5% (10~30°C)	Brix $\pm$ 0.2% (10~30°C)	Brix $\pm$ 0.1%
Repeatability	Brix $\pm$ 0.1%	Brix $\pm$ 0.1%	Brix $\pm$ 0.1%	Brix $\pm$ 0.1%	Brix $\pm$ 0.25%	Brix $\pm$ 0.1%	Brix $\pm$ 0.1%
Size & Weight	3.3x3.3x20.4cm,160g		3.3x3.3x16.8cm,120g			3.3x3.3x20.4cm,160g	

Non Automatic Temperature Compensation							
	MASTER-M	MASTER-2M	MASTER-3M	MASTER-4M	MASTER-53M	MASTER-10M	MASTER-20M
Cat.No.	2313	2323	2333	2343	2353	2373	2383
Scale range	Brix 0.0~33.0%	Brix 28.0~62.0%	Brix 58.0~90.0%	Brix 45.0~82.0%	Brix 0.0~53.0%	Brix 0.0~10.0%	Brix 0.0~20.0%
Minimum Scale	Brix 0.2%	Brix 0.2%	Brix 0.2%	Brix 0.2%	Brix 0.5%	Brix 0.1%	Brix 0.1%
Size & Weight	3.3x3.3x20.4cm,160g		3.3x3.3x16.8cm,120g			3.3x3.3x20.4cm,160g	

Automatic Temperature Compensation & Water Resistant (Heat Resistant model)					Refractive Index
	MASTER-50H	MASTER-80H	MASTER-93H	MASTER-100H	MASTER-RI
Cat.No.	2354	2364	2374	2384	2612
Scale range	Brix 0.0~50.0%	Brix 30.0~80.0%	Brix 45.0~93.0%	Brix 60.0~100.0%	Refractive Index 1.435~1.520
Minimum Scale	Brix 0.5%	Brix 0.5%	Brix 0.5%	Brix 0.5%	Refractive Index 0.001
Accuracy	Brix $\pm$ 0.5%	Brix $\pm$ 0.5%	Brix $\pm$ 0.5%	Brix $\pm$ 0.5%	—
International Protection Class	IP65 Dust-tight and protected against water jets (except for eyepiece).				—
Size & Weight	3.3x3.3x16.8cm,120g				

<h3>T series</h3> <p>MASTER-T series are equipped with Automatic Temperature Compensation feature. Not equipped with the Water Resistant feature.</p>	<h3>H series</h3> <p>MASTER-H series are designed for measuring high-temperature samples during cooking or boiling process at production sites.</p>	<h3>M series</h3> <p>MASTER-M series are good alternative choice when the Water Resistant feature is not a priority, and the Temperature Compensation will be carried out manually.</p>
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All ATAGO refractometers are designed and manufactured in Japan.

**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 appearance are subject to change without notice.

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