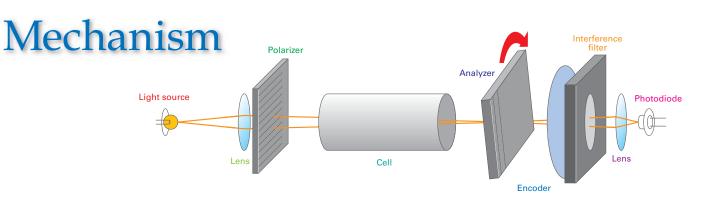
Here at last – the product of our uncompromising pursuit of ultimate usability.

- •FDA 21 CFR Part 11 Software Included in Standard Delivery NEW
- Measurement stability in 12 seconds (4 seconds in the high-speed & consecutive measurement mode)
- Resolution of up to 3 decimal places
- Repeatability of $\pm 0.0030^{\circ}$ Angle of Rotation and $\pm 0.0090^{\circ}$ Z
- Up to 999 automatic consecutive measurements followed by average value display
- •Sleep & timer feature to take measurement later at specified time
- Improved usability with the use of touch screen technology
- Connectivity to RX Digital Refractometers for automatic purity measurement







Specifications

SAC-i Cat.	No.5951
Measurement *1	Angle of Rotation: ±0.005° (-45.0140 to +45.0140°)
accuracy	$International\ Sugar\ Scale: \pm 0.015^{\circ}Z\ (-130.0000\ to\ +130.0000^{\circ}Z)$

Other ranges	Angle of Rotation: ±0.01°
	International Sugar Scale: +0.02°7

	International Sugar Scale: ±0.03°Z
Repeatability *1	±0.003° Angle of Rotation and ±0.009°Z
Sensitivity	up to OD2*2
Measurement wavelength	589nm (D-line)

LED: 589nm interference filter

SAC-i 589/882 Cat.No.595

Measurement *1 589nm: Angle of Rotation: ±0.005° (-45.0140 to +45.0140°) International Sugar Scale: ±0.015°Z (-130.0000 to +130.0000°Z)

Other ranges Angle of Rotation: ±0.01° International Sugar Scale: ±0.03°Z

882nm: Angle of Rotation: ±0.005° (-18.7020 to +18.7020°) International Sugar Scale: ±0.015°Z (-130.0000 to +130.0000°Z) Other ranges | Angle of Rotation: ±0.01°

International Sugar Scale: ±0.07°Z

Prism	Glan Tayler Prism
Measurement wavelength	589nm 882nm
Light source	LED: 589nm interference filter,

- *1 Checked by reading a standard quartz plate.
- *2 OD = optical density: a measure of light absorbance. OD2 = 1/100 attenuation and 1% transmission.

SAC-i series Common Specifications

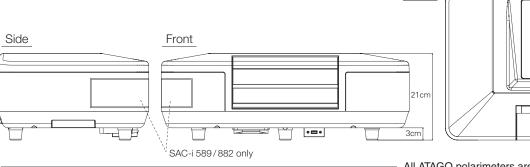
Common Specifications
Angle of Rotation
International Sugar Scale (without temperature compensation)
International Sugar Scale (with Automatic Temperature Compensation)
Specific Rotation
Concentration
Purity
User scale
Angle of Rotation of Quartz Plate (with Automatic Temperature Compensation)
Temperature (°C/°F)
Angle of Rotation:-89.9999 to +90.0000° and -360.0000 to +360.0000° International Sugar Scale:-259.0000 to +259.0000°Z
Angle of Rotation: 0.0001°

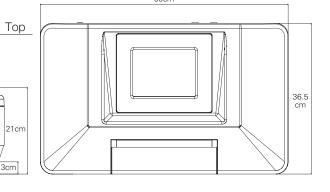
	International Sugar Scale: 0.0001°Z
Temperature compensation range	10 to 40°C
Temperature display accuracy	±0.2°C
Ambient temperature	Use the instrument where the temperature is between 10 to 40°C $$
Display method	7.5-inch color LCD + touch screen
Printer output	Digital printer DP-AD/DP-63 (sold separately) Output method: RS-232C (9 pin D-Sub male connector)

,	Output method: RS-232C (9 pin D-Sub male connector)
Data output to USB flash drive	CSV text file format
Communication with computer	Communication via: USB-Serial
Observation tube included	Observation tubes (100mm [5ml], 200mm [10ml])
Power supply	AC100V to 240V, 50/60 Hz
D ::	1.10) (4

Dimensions and weight 60.0×36.5×21.0cm, 20.0kg (Main Unit only)

Dimensions





All ATAGO polarimeters are designed and manufactured in Japan.



Headquarters: The Front Tower Shiba Koen, 23rd Floor TEL: 81-3-3431-1943 FAX: 81-3-3431-1945





ATAGO U.S.A., Inc. CATAGO INDIA Instruments Pvt. Ltd. TEL: 91-22-28544915, 40713232 customerservice @ atago-india.com ATAGO THAILAND Co., Ltd. ATAGO BRASIL Ltda. TEL: 55 16 3913-8400 ATAGO ITALIA s.r.i. ATAGO CHINA Guangzhou Co., Ltd. TEL: 86 20-38106065 ATAGO RUSSIA Ltd. TEL: 7-812-777-96-96

* Specifications and appearance are subject to change without notice.





SAC - 1 Cat.No.5951 SAC-i589/882

Automatic Polarimeter / Saccharimeter



High Performance Sugar Analysis, Now Easier Than Ever.



and 882nm by changing the optical units.

SAC-882/589 can measure samples at both 589nm

decolorization treatment.

FDA 21 CFR Part11 compliant

SAC-1 Cat.No.5951 SAC-1589/882 cat.No.5952



Smooth and Accurate Operations, Guaranteed

 $\alpha = +33.1298^{\circ}$

ADM2

MODE 1

...(¹)...• 000sec

Measurement screen with setting sub-window (lower left)

← → Back space

1 2 3

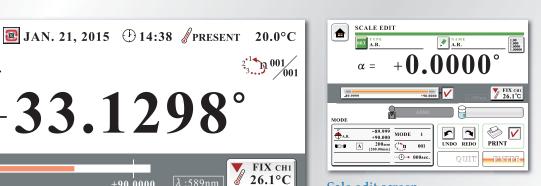
QUIT HENTE

Basic settings are easily accessible from a sub-window within the main measurement screen. With a touch on the screen, it can switch to display the last 10 measurement history.

MODE

-89.999

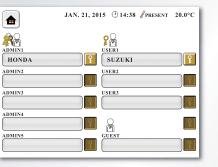
+90.000 A 200mm 2.1 10 2



Touch Screen

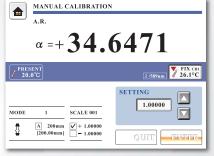
Sale edit screen

Edit and save your own scales with ease.



High-security protection

Design your ideal data security system with the 4 system levels in combination with 9 individual user passwords.



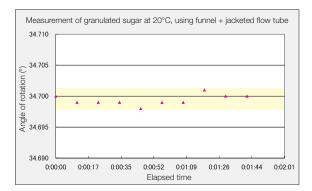
Manual calibration

Correct measurement discrepencies among units within the accuracy specification for consistency across multiple units.

Exceptional Stability & Reliability

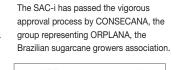
Increased repeatabilit

ATAGO's innovations in technology has made high-stability measurement possible. The repeatability is the best in its class, and sample types that are conventionally difficult to measure can be measured with great repeatability and accuracy.



PTB traceability

Manufacturing and calibration is executed with quartz control plates made to the German PTB standards.





User-Friendly Construction





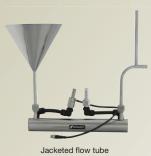
Hardware

Flow cell (sold separately)

The chamber cover opens forward, allowing for hassle-free installation of the flow cell attachment



Accessories



Observation tubes

RE-72080: Observation tube 50mm OT-50(I) (SUS) 2.5ml RE-72078: Observation tube 100mm OT-100(I) (SUS) 5ml RE-72079: Observation tube 200mm OT-200(I) (SUS) 10ml

RE-72113: Jacketed flow tube with funnel 100mm RE-72114: Jacketed flow tube with funnel 200mm

RE-72037: Unjacketed flow tube with funnel 100mm RE-72038: Unjacketed flow tube with funnel 200mm

RE-72042: Unjacketed small volume observationtube 10mm long 1ml RE-72052: Unjacketed Flow Tube (Glass) 100mm/9ml

RE-72110: Jacketed flow tube 50mm (With water jacket)

RE-72111: Jacketed flow tube 100mm (With water jacket)

RE-72112: Jacketed flow tube 200mm (With water jacket) RE-72051: Unjacketed Flow Tube (Glass) 50mm/4.5ml

Input method: RS-232C Type of printer: Thermal printing

Measurement mode screen

mode, wait time, consecutive measurements,

Customize measurement methods -

temperature, and more.

DP-63 Cat.No.3118

Printing data fields: Angle of rotation, International Sugar Scale.

Specific optical rotation, Concentration, Purity, Length of sample tube, Measurement temperature, Day, Month, Year and Time Power supply : AC adapter

Power consumption: (Input voltage: AC100 to 240V) 13VA Dimensions and weight : 17×16×7cm,580g (main unit only) Dimensions and weight 11×18×9cm, 470g (main unit only)

Digital printer DP-AD cat.No.3123

SAMPLE2

ZERO

_ # 0

05 JAN. 21, 2015 14:35 A.R. 589 +34.6467° 20.0 04 JAN. 21, 2015 14:36 A.R. 589 +34.6473° 20.0 04 JAN. 21, 2015 14:35 A.R. 589 +34.6458° 20.0 0.9 JAN. 21, 2015 14:35 A.A. 509 7-34,6458° 2.0.0 1
0.0 JAN. 21, 2015 14:35 A.R. 589 7-34,6458° 2.0.0 1
0.1 JAN. 21, 2015 14:35 A.R. 589 7-34,6467° 2.0.0 1
0.1 JAN. 21, 2015 14:12 ZERO 589 ZERO SET END 20.0 1
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0.1 JAN. 21, 2015 14:12 ZERO 589 ZERO SET END 20.0 1
0.1 JAN. 21, 2015 14:12 ZERO 589 ZERO SET END 20.0 1

Up to 5,000 each of measurement and zero-

setting / calibration data can be stored.

CLEAR 001 D

Input method : RS-232C Type of Printer: Dot matrix printing Printing data fields: on rolled plain paper (not thermal) Angle of rotation, International Sugar Scale, Specific optical rotation, Concentration, Purity, length of sample tube, Measurement temperature, Dav. Month, Year and Time Power supply : AC adapter

Power consumption : 430VA Power consumption : (Input voltage : AC100 to 240V) 7VA Dimensions and weight : 38×24×27cm, 11.0kg

Circulating constant temperature Bath 60-C4 Cat.No.1922

Tank capacity : 0.5L Temperature setting range : 10 to 60°C (water) Constant-temperature ±0.2°C, PID control method accuracy : using a thermo-module Flow rate 4L / min.

Power supply : AC100 to 240V, 50 / 60Hz (main unit only)

Quartz control plates RE-72043: Quartz Control Plate 8° (25°Z)

RE-72044 : Quartz Control Plate 17° (50°Z) RE-72045 : Quartz Control Plate 34° (100°Z) RE-72048 : Quartz Control Plate -8° (-25°Z) RE-72049 : Quartz Control Plate -17° (-50°Z) RE-72050 : Quartz Control Plate -34° (-100°Z)

FDA 21 CFR Part11 Software Software for compliance with 21 CFR Part 11 requirements on electronic records and electronic signatures. Cat.No.3167

Included software