

تهران، خيابان مطهري، خيابان فجر، يلاك 38



AP-300

**CATAGO®** 



تهران، خيابان مطهري، خيابان فجر، يلاك 38



021-88832100 021-88321727 021-88321728



www.abzarteb.com abzar.teb 0



## **Features**

NEW FDA 21 CFR Part 11 Software Included in Standard Delivery.

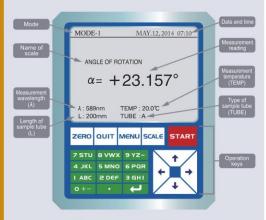
NEW With high resolution : Angle of rotation 0.001°, International Sugar Scale 0.001°Z

- ■Easy To Use: Simply place an observation tube in the sample chamber of the AP-300 and press START key
- Automatic Temperature Compensation Function for International Sugar Scale with a range between 18°C and 30°C
- Conforms with ICUMSA standards
- Built in memory stores the 30 most recent measurement readings
- Out-of-range measurements are indicated instantly by graphic display
- ■The AP-300 offers ease of use with a very competitive price
- **■Compact and space saving**
- Average Measurement Value is Displayed!
- ■Password Function as necessary for ISO

# **Application**

- ■Measures the specific optical rotation of medical
- ■Measures the concentration of optically active substances found in fragrance materials or chemical compositions
- ■Measures the international sugar scale and the purity of sugar
- ■Identifies the attributes of inverted sugar, etc.
- ■Measures the specific optical rotation or the concentration of optically active substances

## Example of angle of rotation display



#### **Explanation of measurements display**

#### Angle of rotation

The angle of rotation is the basic numeric value measured by polarimeters, and changes depending on the concentration of the solution, the length of the observation tube, temperature, and/or the measurement wavelength. It is symbolized by "a" and indicated in "

The International Sugar Scale

The International Sugar Scale is indicated in ""Z."

The measurement value of 26g of sucrose in 100ml of sucrose solution in a 200mm observation tube is 100°Z. This measurement value is commonly used in the sugar manufacturing industry, and is usually temperature-compensated to the reference temperature of 20°C (68°F).

The AP-300 can display the measurement value with or without temperature compensation (Automatic Temperature Compensation, "ATC").

## Specific Rotation

The Specific Rotation is a numeric value unique to each substance. By definition, the specific rotation value is equivalent to the angle of rotation obtained by a measuring a solution of 100% concentration in a 100mm observation tube (although such a measurement is actually not practical).

Specific rotation is symbolized by "[a]" and indicated in "°."

 Concentration
 The Concentration is the density of a liquid solution made by dissolving an optically active substance in water or alcohol. It is indicated in "g/100ml."

Purity
The Purity is the proportion of sucrose compared to the soluble solid
content in a sample. It is indicated in "%." To measure the purity, input
the Brix value of the sample (which can be obtained by using an ATAGO
refractometer) into the AP-300 before taking a measurement.



# Observation tubes

RE-72054 : Observation tube 100mm OT-100(A)(SUS)/5ml

RE-72055 : Observation tube 200mm long OT-200(A)/10ml

RE-72034 : Jacketed flow tube 100mm/4.5ml RE-72035 : Jacketed flow tube 200mm/9ml

RE-72051: Unjacketed flow tube (Glass) 50mm/4.5m0

RE-72052 : Unjacketed flow tube (Glass) 100mm/9ml

RE-72033 : Jacketed flow tube with funnel 100mm/11m0 RE-72032 : Jacketed flow tube with funnel 200mm/15m0

RE-72038 : Unjacketed flow tube with funnel 200mm/15mℓ

RE-72042 : Unjacketed small volume observation tube 10mm long/1mℓ

RE-76015 : Sample chamber cover for Flow Cell (Cover only)

RE-76018 : Inner lid for 50mm tube

RE-76016 : Inner lid for 100mm tube

\*To use the flow tubes, the sample chamber RE-76015 and a inner lid matching the size of the tube will be necessary to be purchased.

# Special Packages

ATAGO has prepared 4different AP-300 packages.

### Recommended for sugar industry

## Type A

Jacketed flow tube

with funnel

# **Temperature Control**

Cat.No.5296

- AP-300
- Jacketed flow tube with funnel (200mm-approximate volume 15ml)

  \* Circulating Constant Temperature Bath 60-C4 (Cat.No.1922) sold separately.

# Type B

# **No Temperature Control**

Cat.No.5297

- AP-300
- Unjacketed flow tube with funnel (200mm-approximate volume 15ml)

### Recommended for pharmaceutical industry

# Type C

#### **Temperature Control**

Cat.No.5294

- AP-300
- Jacketed flow tube(100mm)
- Inner Lid (For Tube 100mm)
- Quartz Control Plate (8°, 17°, or 34°)
- Digital printer DP-AD
- Printer paper for DP-AD
- Ribbon cassette for DP-AD
- Circulating Constant Temperature Bath 60-C4 (Cat.No.1922) Contact your nearest ATAGO representative for details.



# Type D

### **No Temperature Control**

Cat.No.5295

- AP-300
- Quartz Control Plate (8°, 17°, or 34°)
- Digital printer DP-AD
- Printer paper for DP-AD
- Ribbon cassette for DP-AD

Options other than above mentioned 4 types are available.



