



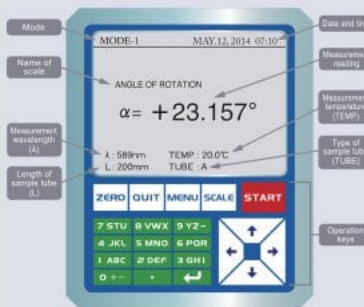
**Features**

- **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 Standard!

**Application**

- Measures the specific optical rotation of medical agents
- 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 "α" and indicated in "°".
- **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 "[α]" 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.



**Special Packages**

ATAGO has prepared 4different AP-300 packages.

**Recommended for sugar industry**

**Type A**

**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 (6", 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)

**Type**

**No**

Cat.No.5

- AP-30
- Quartz
- Digital
- Printer
- Ribbon

Options ( Contact )