

## Automatic POLARIMETERS



### INE-SGW-5/3, Automatic Polarimeters

- At least 2 wavelengths to 6 wavelengths can be selected;
- Need not to prewarm when turning on;
- Measuring specific rotation, optical rotation, sugar degree and concentration;
- Automatic repetition-measurement for 6 times, and calculation of average value and means square root;
- Peltier principle to control the temperature;
- Measurement of dark-colored sample;
- USB.

| Model                     | INE-SGW-5                                                                                                                                                      | INE-SGW-3                                                          |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|
| Measurement mode          | Optical rotation, specific rotation, sugar degree, concentration                                                                                               |                                                                    |
| Light source              | 20W halogen tungsten lamp                                                                                                                                      | LED                                                                |
| Measurement range         | $\pm 89.999^\circ$ (optical rotation) $\pm 259^\circ \text{Z}$ (sugar)                                                                                         | $\pm 89^\circ$ (optical rotation) $\pm 257^\circ \text{Z}$ (sugar) |
| Working wavelength        | 546,589nm (standard)<br>405,436,578,633nm (optional)                                                                                                           | 589.3nm                                                            |
| Minimum indicating value  | $0.001^\circ$ (optical rotation)                                                                                                                               | $0.001^\circ$ , $0.01^\circ \text{Z}$                              |
| Accuracy                  | $\pm 0.01$ ( $-15^\circ \leq \text{optical rotation} \leq +15^\circ$ )<br>$\pm 0.02$ (optical rotation $< -15^\circ$ or optical rotation $> +15^\circ$ )       |                                                                    |
| Repeatability             | $0.002^\circ$ ( $-45^\circ \leq \text{optical rotation} \leq +45^\circ$ )<br>$0.005^\circ$ (optical rotation $< -45^\circ$ or optical rotation $> +45^\circ$ ) | $0.002^\circ$ ( $0.006^\circ \text{Z}$ )                           |
| Temperature control range | 15–30°C                                                                                                                                                        |                                                                    |
| Temperature accuracy      | $\pm 0.5^\circ \text{C}$                                                                                                                                       |                                                                    |
| Display                   | 7 inch color touch screen                                                                                                                                      |                                                                    |
| Operation system          | Windows                                                                                                                                                        |                                                                    |
| Test tubes                | 200mm/100mm (regular) 100mm (temp control)                                                                                                                     |                                                                    |
| Sample transmittance      | $> 1\%$                                                                                                                                                        |                                                                    |
| Interface                 | USB                                                                                                                                                            |                                                                    |
| Data storage              | 1500 sets                                                                                                                                                      |                                                                    |
| Operation voltage         | 220V $\pm$ 22V, 50Hz or 110V $\pm$ 11V, 60Hz                                                                                                                   |                                                                    |
| Weight (Gross)            | 36kg                                                                                                                                                           | 40kg                                                               |
| Overall Dimensions        | 850mm 500mm 470mm                                                                                                                                              |                                                                    |