

# AELAB Automatic Digital Refractometer SGW-756 / SGW-753

Measures refractive index (nD) and Brix within validated ranges.



Built-in Peltier temperature control,  
5-85°C range,  $\pm 0.02^\circ\text{C}$  accuracy.



**Measuring range**  
Refractive index (nD):  
1.30000-1.70000  
Brix: 0-100%



**Measuring accuracy**  
Refractive index (nD):  
 $\pm 0.0002$   
Brix:  $\pm 0.1\%$



**Resolution**  
Refractive index (nD):  
 $\pm 0.00001$   
Brix:  $\pm 0.01\%$



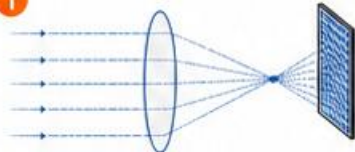
**Temperature control range**  
5-85°C



**Temperature control accuracy**  
 $\pm 0.02^\circ\text{C}$

## FEATURES

1



### High-resolution CCD detection

High resolution CCD detection system for optical measurement.

2



### Speed and repeatability

Fast measuring speed and good repeatability as validated in source data.

3



### Corrosion- and scratch-resistant prism

Prism described as corrosion-resistant and scratch-resistant with easy cleaning and durability.

4



### Small sample volume with recycling

Minimum sample amount is approximately 0.5 ml; sample can be recycled.

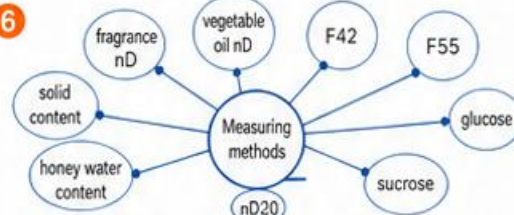
5



### Long-life LED light source

LED light source rated for over 100000 hours.

6



### Multiple measuring methods

Supports multiple validated measuring methods (fragrance nD, vegetable oil nD, F42, F55, glucose, sucrose, solid content, honey water content, nD20, user-defined formula).

7



### Graded management and operation

Supports graded management and provides scientific, user-friendly operation as validated.

## SPECIFICATIONS

| Parameter                    | SGW-756                                                          | SGW-753                                                 |
|------------------------------|------------------------------------------------------------------|---------------------------------------------------------|
| Measuring range              | Refractive index (nD): 1.30000-1.70000 Brix: 0-100%              | Refractive index (nD): 1.30000-1.70000 Brix: 0-100%     |
| Measuring accuracy           | Refractive index (nD): $\pm 0.0002$ Brix: $\pm 0.1\%$            | Refractive index (nD): $\pm 0.0002$ Brix: $\pm 0.1\%$   |
| Resolution                   | Refractive index (nD): $\pm 0.00001$ Brix: $\pm 0.01\%$          | Refractive index (nD): $\pm 0.00001$ Brix: $\pm 0.01\%$ |
| Audit Trail                  | Optional                                                         | /                                                       |
| Temperature control mode     | Peltier (Built-in)                                               | Peltier (Built-in)                                      |
| Temperature display range    | 0-100°C                                                          | 0-100°C                                                 |
| Temperature control range    | 5-85°C                                                           | 5-85°C                                                  |
| Temperature control accuracy | $\pm 0.02^\circ\text{C}$                                         | $\pm 0.02^\circ\text{C}$                                |
| Prism                        | Artificial sapphire                                              | Artificial sapphire                                     |
| Operating system             | Windows                                                          | /                                                       |
| Display                      | 8 inch color touch screen                                        | 8 inch color touch screen                               |
| Data storage                 | 16G                                                              | 1000 sets                                               |
| Interface                    | USB, Keyboard, Mouse, Ethernet, Universal Printer, Optional WLAN | USB, U Disk                                             |
| Power supply                 | 100V~240V, 50/60Hz, 150W                                         | 100V~240V, 50/60Hz, 150W                                |
| Overall dimensions           | 570mm×460mm×300mm                                                | 570mm×460mm×300mm                                       |
| Weight (gross)               | 5kg                                                              | 5kg                                                     |



**Website:**  
<https://aelabgroup.com/>



**Email:**  
[info@aelabgroup.com](mailto:info@aelabgroup.com)



**WhatsApp:**  
[+8615800016110](https://wa.me/8615800016110)