

Easy  
to use!

High  
Performance!

Great  
low price!

ATAGO®

# Propylene Glycol Checker!!

Digital Hand-held "Pocket" Propylene Glycol Refractometer

## PAL-88S, PAL-89S

Cat.No.4488,4489

### Application

The "Pocket" Propylene Glycol Refractometers, PAL-88S, and PAL-89S, easily measures Propylene Glycol solutions and display the results digitally. The freezing point of the sample can also be measured and displayed.

### Features

- Calibration with water only
- Measurement in 3 seconds
- Extremely water resistant (IP65)
- Light & Compact, 100g
- Ergonomically designed for easy, one-handed operation
- Convenient storage case
- Automatic Temperature Compensation (ATC)
- Designed with a strap holder option

### Measuring Method



① Place the sample onto the prism surface.



② Press the START key.



③ The measurement value will be displayed in 3 seconds.



④ **\*Secondary Scale:** Press the START key for 2 seconds while the concentration (%) is indicated, to display the freezing point (°C/°F).



Actual  
Size

### Specifications

	PAL-88S	PAL-89S
<b>Measurement range</b>		
Concentration of Propylene Glycol *Main scale	0.0 to 90.0% (V/V)	0.0 to 90.0% (V/V)
Freezing point of Propylene Glycol *Secondary scale	0 to -50°C	32 to -60°F
<b>Resolution</b>		
Concentration of Propylene Glycol *Main scale	0.2% (V/V)	0.2% (V/V)
Freezing point of Propylene Glycol *Secondary scale	1°C	1°F
<b>Measurement accuracy</b>		
Concentration of Propylene Glycol *Main scale	±0.4% (V/V)	±0.4% (V/V)
Freezing point of Propylene Glycol *Secondary scale	±1°C	±1°F
<b>Measurement temperature</b>	10 to 40°C (Automatic Temperature Compensation)	50 to 104°F
<b>Sample volume</b>	0.3ml or more	
<b>Measuring time</b>	3 seconds	
<b>International Protection Class</b>	IP65 Water Resistant	
<b>Power supply</b>	2×AAA Batteries	
<b>Battery life</b>	Approx 11,000 measurements (When an alkaline battery is used)	
<b>Dimensions and weight</b>	55(W)×31(D)×109(H)mm, 100g (Main Unit only)	

All ATAGO refractometers are designed and manufactured in Japan.

**HACCP GMP GLP**

ATAGO products comply with HACCP, GMP, and GLP system standards.

\* Specifications and appearance are subject to change without notice.