

# Analytical and Measuring Instruments



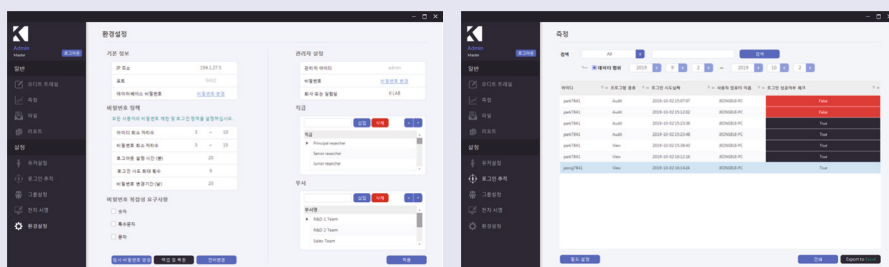
## OPTIZEN SERIES

UV-Vis Spectrophotometer



OPTIZEN Alpha

- Wavelength Range(190 - 1100 nm)
- Double-beam Type
- Spectral Bandwidth : 1 nm
- Measurable Range : -4 A - 4 A
- 8 Cell holder (Initially installed)
- Voice support



### OPTIZEN Secure

OPTIZEN Secure is Windows® PC software can manage, check and trace user activities(Login, measurement, print) at OPTIZEN View. You need OPTIZEN View(CFR mode included) to use OPTIZEN Secure.

# OPTIZEN Alpha

The luxuriously designed OPTIZEN Alpha is spectrophotometer to use double-beam method.

OPTIZEN Alpha can grasp the quantitative characteristics such as density or purity by measuring transmittance or optical density according to wavelength of sample in the range of ultraviolet rays and visible ray. OPTIZEN Series can be utilized from not only a general analysis experiment to but also a specialized research field and guarantee accurate measurement and excellent reproducibility, accordingly offer reliable results in the various fields such as environment, biotechnology, chemistry, etc.

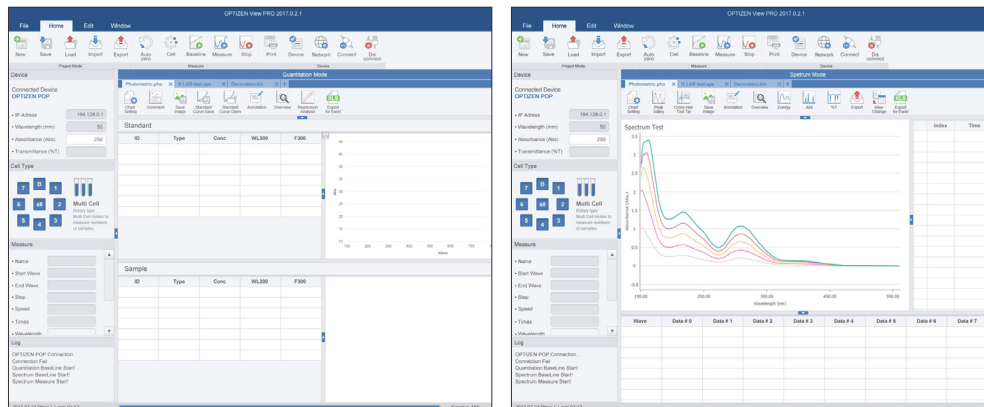


The previous single beam type spectrophotometer has a weak point of error occurrence in measuring a sample, because of the movement of a light source by time lag in measuring the strength of between a reference light and a light from sample. To solve the problem, OPTIZEN Alpha was designed as a double-beam type spectrophotometer. The system utilizes an additional reference beam to improve the measurement performance by compensating the intensity fluctuation of its light source.

- 01 Offering self-diagnosis function
- 02 Easily and quickly call up the information that is being measured or analyzed by registering it in you favorites.
- 03 Changing to the remote mode and then can link it with PC by using OPTIZEN View.
- 04 The measurement is possible in the optimal condition by checking the equipment's operation time, lamp warm up condition and accumulated using time in real time.
- 05 OPTIZEN Alpha's login function can prevent the measured data from leaking to many and undesignated persons.
- 06 Various cell compatibility and fast cell type choice.
- 07 Automatic measurement of lots of samples by equipping multi-cell.
- 08 Convenient voice service and volume control.
- 09 Offers 32GB storage.
- 10 Data can be printed by connecting to the machine without installing a printer driver



## OPTIZEN View



OPTIZEN View, PC-Interface software of OPTIZEN Series, enables the user to check and control the result of sample measurement in real time in Windows® environment and facilitate the general management related to the device and the measurement.

Specifications			
Photometrics System	Double-beam type		± 0.0002 at 0.5 A
Light Source(s)	Tungsten Halogen Lamp & Deuterium Lamp	Photometric Repeatability	± 0.0006 at 1.0 A
	(Built-in light source auto interchanging motor)		± 0.001 at 2.0 A
Detector	Silicon Photodiode	Baseline Stability	< 0.0003 A/h
Spectral Bandwidth	1 nm (190 - 1100 nm)	Baseline Flatness	< ± 0.0005 A
Wavelength Range	190 - 1100 nm	Stray Light	< 0.02% NaI at 220 nm
Wavelength Display (setting)	0.05 nm		NaNCat 340 nm
Wavelength Accuracy	± 0.3 nm (For entire range)	Monochromator	Czerny-Turner type with 1200 lines/nm blazed grating
	± 0.1 nm (656.1 nm)	Standard Cell Holder	Automatic Rotary type 8-position Multi-Cell Holder
Wavelength Repeatability	< ± 0.1 nm	Operating System (OS)	Windows®10 (Embedded PC)
Slew Rate	About 13,500 nm/min	Display	8 inch color LCD with touch screen
Scanning Speed	max 6,000 nm/min	Control Options	Onboard with built-in touchscreen
Photometric Range	Absorbance: -4 A - 4 A		Computer (OPTIZEN View)
	Transmittance: 0% - 400%	Dimensions(W × H)	520 mm×500 mm×200 mm
Photometric Accuracy	±0.002 Abs at 0.5 Abs	Power Requirement	100 - 240 V; 50 - 60 Hz
	±0.004 Abs at 1.0 Abs	Weight	14 kg
	±0.006 Abs at 2.0 Abs	PC Software	(optional) OPTIZEN View for Windows

## ACCESSORIES

OPTIZEN Series offer the perfect solution suitable for each laboratory and experimental environment owing to their compatibility with the various accessories.



### Film Cell Holder – Wide & Small Type

The single cell holder available for measuring the solid sample for a light to pass through such as an optical film or a slide glass.

Sample Size: Wide - max. 100 mm(H) x 70 mm(W), Small - max. 100 mm(H) x 30 mm(W)  
Sample Thickness: Wide - max. 5 mm, Small - max. 2 mm

#### (\*) Compatible Products

- OPTIZEN POP
- OPTIZEN POP-V
- OPTIZEN Alpha



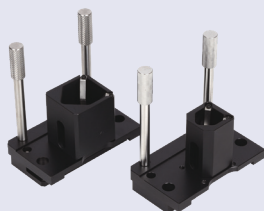
### Micro Volume Cell Holder

The single cell holder available, in case that sample's volume is below 5000

Optical Path Length: 10 mm  
Center Height: 15 mm

#### (\*) Compatible Products

- OPTIZEN POP
- OPTIZEN POP-V
- OPTIZEN Alpha



### Round Cell Holder

The single cell holder available, when using circle cell to analyze a sample.

Test Tube Diameter: 16 mm / 25 mm  
Test Tube Height: max. 100 mm

#### (\*) Compatible Products

- OPTIZEN POP
- OPTIZEN POP-V
- OPTIZEN Alpha



### Long Path Cell Holder

The single cell holder is used, when measuring after lengthening a light path in order to analyze a low density sample.

Optical Path Length: 50 - 100 mm

#### (\*) 호환 제품

- OPTIZEN POP
- OPTIZEN POP-V
- OPTIZEN Alpha

### Temperature Cell Holder (Water/Oil Circulator Type)

This is used to control the temperature of the cell holder by using a temperature circulatory device.

Tubing Size: 6 mm

#### (\*) Compatible Products

- OPTIZEN POP
- OPTIZEN POP-V
- OPTIZEN Alpha



### Multi Cell Holder

The multi cell holder to be able to measure automatically a great volume of sample.

#### (\*) Compatible Products

- 8 Cell holder
- OPTIZEN Alpha (\*Initially installed)
- OPTIZEN POP (\*Initially installed)
- OPTIZEN POP-V (\*Initially installed)



### Sipper

It is possible to perform automatic suction and measurement of liquid samples, and it has a built-in function to automatically correct the amount of suction, enabling accurate and stable sample processing.

Flow rate range: 0.035~570  
Speed range: 0.5~150 rpm  
Speed resolution: 0.1 rpm (0~100 rpm), 1 rpm (100~600 rpm)

#### (\*) Compatible Products

- OPTIZEN POP
- OPTIZEN POP-V
- OPTIZEN Alpha

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