# TANAKA
*Petroleum Testing & Beyond*

## *Spectrophotometer for Petroleum Products*

# *acl-3*

## 4 types of colors can be measured.

- ASTM Color
- Saybolt Color
- Pt-Co / Hazen Color Number (APHA)
- Gardner Color Number



## Features

- Spectrophotometer using white LED as light source

- Sliding door which makes setting of cells up to the size of 100mm very easy

- 5.7" TFT color LCD touch panel realizes intuitive operation and clear view of parameters and results

- Measurement data can be saved into USB memory stick.

# Specifications
## *Spectrophotometer for Petroleum Products* $acl$-$3$ CE

| | | | |
|---|---|---|---|
| Test Methods | ASTM Color | : | ASTM D1500, D6045, ISO 2049 |
| | Saybolt Color | : | ASTM D156, D6045 |
| | Pt-Co / Hazen Color | : | ASTM D1209, D5386, ISO 6271 |
| | Gardner Color | : | ASTM D1544, ISO 4630 |
| Measuring Method | Tri-Stimulus values from spectroscopy method | | |
| Photodetector | CMOS Linear image sensor | | |
| Measuring Wavelength | 400 nm to 700 nm, 10 nm interval | | |
| Light Source | White LED (Lifetime : approx. 20,000h) | | |
| Display Panel | 5.7 inch TFT color LCD Touch Panel | | |
| Measuring Time | Approx. 5 sec | | |
| Operation Switches | Touch panel, Membrane switch | | |
| USB Memory | Measurement data and instrument memory data can be saved as CSV. Screen image can be saved. Import and export of user settings (File system FAT32) | | |
| Interface | USB port  (for communication with PC) USB memory  (for file system : FAT32) Parallel port  (for printer) | | |
| Environment for Use | Temperature :  15 ℃  to  35 ℃,  Humidity :  80 % RH or less,  No condensation | | |
| Size ( W x D x H ) | 540 x 383 x 255 mm | | |
| Weight | 15.5 kg | | |
| Power Consumption | AC 100 V to 240 V   40 VA (max)   50 / 60 Hz | | |

## Standard Accessories (1 pc each)

| Code No. | Part Name |
|---|---|
| ---------- | AC cable |
| ---------- | USB memory stick |
| 1000916 | Square Cell (33mm) for ASTM, Pt-Co, Gardner Color |
| 1000917 | Square Cell (100mm) for Saybolt Color |

## Optional Accessories

| Code No. | Part Name |
|---|---|
| 1006171 | Printer for acl-3, model CT-S280 |
| 1006174 | Printing Roll Papers |
| 1000913 | Cell with Cap (33mm) for ASTM, Pt-Co and Gardner Colors |
| 1000914 | Cell with Cap (100mm) for Saybolt Color |
| 1000915 | Cells with Cap for Color Standards (Set of 11pcs) |

## Start Up Kit for ASTM and Saybolt Color

| | |
|---|---|
| ASTM Color Standards | ASTM Color   :  A1, A3, A5, A7 [1] |
| Saybolt Color Standards | Saybolt Color :  S+30, S+25, S+19, S+15, S+12, S0, S-15 [1] |

[1] Color Standards can be ordered separately. Please contact local distributors for details.

### Standard Accessories



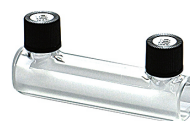Square Cell (33mm)    Square Cell (100mm)

### Optional Accessories



Cell with Cap (33mm)    Cell with Cap (100mm)    Optional Printer, CT-S280