

Transmittance Spectrophotometer

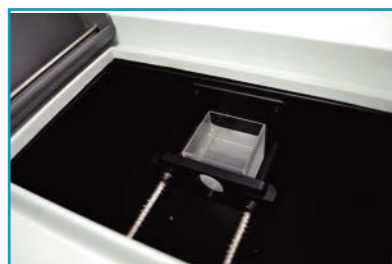


# CS-810

## Product Features

### Glass and Liquid Color Measurement

CS-810 transmittance spectrophotometer is specially designed for measuring the material transmittance, absorbance, chromaticity and other datas.



### Adopt UV-enhanced Silicon Photodiode

Transmittance measure range improved from 0-100% to 0-200%

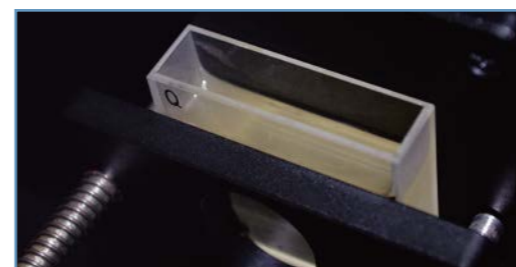
### Pt-Co, Gardner

Pt-Co is suitable for measuring transparency or close to liquid Pt-Co color which is general transparency and brownish yellow.

Gardner is suitable for dark yellow or brownish yellow Pt-Co.



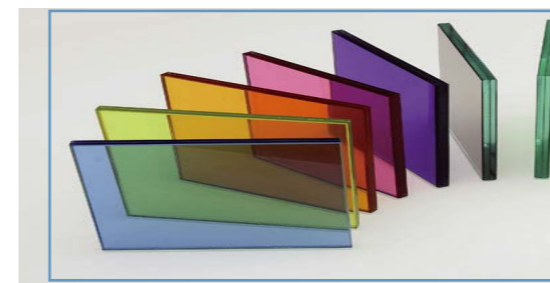
## Application Examples



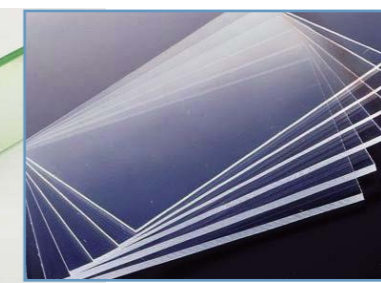
▲ Clear liquid



▲ Pt-Co Standard Solution



▲ Glass



▲ Transparent Plastic

## Technical Data

Model	CS-810	Color Difference	$\Delta E^*ab, \Delta E^*CH, \Delta E^*uv, \Delta E^*cmc(2:1), \Delta E^*cmc(1:1), \Delta E^*94, \Delta E^*00$
Illumination /Viewing System	Illumination: d/0 (diffused illumination, 0 degree viewing) (conform to CIE No.15, ISO 7724/1, ASTM E1164, DIN 5033 Teil7, JIS Z8722 Condition C standard)	Other Indices	WI(ASTM E313-00, ASTM E313-73, CIE/ISO, Hunter, Taube Berger Stensby), YI(ASTM D1925, ASTM E313-00, ASTM E313-73), Tint(ASTM E313, CIE, Ganz) Metamerism index Milm, staining fastness, color fastness, APHA, Hazen, Pt-Co Index, Gardner, Saybolt, ASTM color
Integrating Sphere	40mm, Avian-D Fully diffuse reflective surface coating	Repeatability	Transmittance, standard deviation within 0.08% Chromaticity value: $\Delta E^*ab$ 0.015 (When measuring air 3 0 x at 5-second intervals after air calibration), max. 0.03
Light Source	CLEDs	Inter-instrument agreement	Within $\Delta E^*ab$ 0.2
Detector	Dual optical sensor array	Data Storage	Mass storage (PC)
Wavelength	400-700nm	Interface	USB
Wavelength Pitch	10nm	Light source lifetime	5years, 1.5 million tests
Half Band Width	5nm	Size	475*340*150mm (L*W*H)
Measurement Range/Resolution	0-200% 0.01%	Operate Temperature	0-45°C, relative humidity 80% or below (at 35°C); no condensation
Illuminants	A, C, D50, D55, D65, D75, F1, F2, F3, F4, F5, F6, F7, F8, F9, F10, F11, F12, CWF, U30, DLF, NBF, TL83, TL84	Storage Temperature	-25-55°C, relative humidity 80%, or below (at 35°C), no condensation
Display	Reflectance graph/value, chromaticity value, color difference values, pass/fail, color tendency, color simulation, manually input target value, generate test report	Standard Accessories	Power line, color QC software, driving software, USB cable, black calibration tile, 40x10 cuvette
Measurement Interval	1s	Optional Accessories	40x33mm Cuvette (for ASTM color), 40x100mm Cuvette (for Saybolt)
Measurement Time	1s		
Aperture	10mm (cuvette support)		
Color Spaces	CIE-L*a*b, L*C*h, L*u*v, XYZ, Yxy, Transmittance, Hunterlab, Munsell, MI, CMYK		