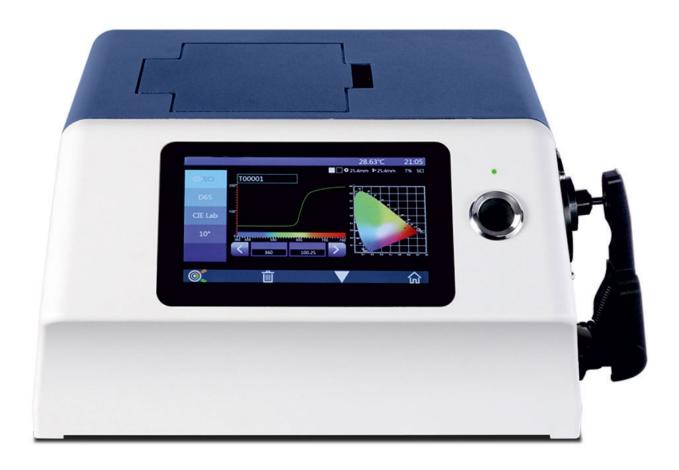
## **STALWART**

# **Benchetop Grating Spectrophotometer ST-606**



#### Introduction

ST-606 is a benchtop grating spectrophotometer which is developed by Stalwart independently with independent intellectual property. ST-606 has many features, like 7 inches TFT capacitive touch screen display, full illuminants, reflective d/8 and transmissive d/0 geometry(including or excluding UV). With very stable and precise color measurement, large storage and powerful PC software all makes ST-606 ideal for color analysis within R&D and laboratory environments.

#### **Features**

- High configuration of hardware: 7 inches TFT Color Capacitive Touch-screen Display; Bluetooth 2.1; Concave Grating.
- Double Array 256 Image Element CMOS Sensor; Long life-span stable LED, UV LED and xenon lamp.
- With reflective and transmissive spectrum, accurate Lab value, good to calculate color formula and do precise color transmission.
- Auto identify measuring aperture. Freely switchable between 4 measuring apertures: φ25.4mm/15mm/8mm/4mm. Users also can customize apertures.
- Built-in temperature sensor to monitor and compensate the measuring temperature to ensure the measurement more precision.
- Wavelength range 360nm 780nm. Built-in 400nm cut off/420nm cut off/460nm cut off (only xenon lamp edition), more professional in UV measurement.
- Independent light source detector, continuously monitor the condition of light sources to ensure the light source reliable.
- Multiple measurement modes: Quality Management Mode, Sample Mode; Meet more users' requirement.
- Multiple accessories, sample holders, fixation clamp, suitable to more working condition.
- Big capacity data storage, for 40000 pieces test result.
- Built-in camera locating.
- More powerful extended functions at the PC software.

#### **Product Highlights**



Plastic Sample
Reflectence Measurement:
Adopt D/8° Geometry,



Transmissive Sample
Transmittance Measurement:
Adopt D/0° Geometry,



Measuring Aperture
Auto-indentify the apertures,
25.4/15/8/4mm four aperture
freely switch. Special aperture
can be customised



**Liquid, Powder, Solid Sample Measurment** 360-780nm wide wavelength range measurement, Professional UV sample measurment.

## **Specification**

Item	ST-606
Optical Geometry	Reflectance: D/8(SCI⪰ Include UV/Exclude UV) Transmittance:
	D/0(SCI⪰ Include UV/Exclude UV)
Integrating Sphere Size	φ154mm
Light Source Device	360nm-780nm Combined LED Lamp, 400nm cut-off, UV Lamp
Sensor	256 Image Element Double Array CMOS Image Sensor
Wavelength Pitch	10nm
Semiband Width	10nm
Reflection Range	0~200%
Measuring Aperture	Reflective:\phi30nm/\phi25.4mm, \phi18mm/\phi15mm,\phi10mm/\ph8mm,
	φ6mm/φ4mm;Transmissive: φ30mm/φ25.4mm
Specular Component	Reflectance: SCI&SCE Transmittance: SCI&SCE
Color Space	CIE LAB, XYZ, Yxy, LCh, CIE LUV, Musell, s-RGB, HunterLab,
	βxy,DIN
Color Difference Formula	ΔE ab, ΔEuv, ΔE 94, ΔE cmc(2:1), ΔE(1:1), ΔE00, DINΔE99,
	ΔE(Hunter)
Observer Angle	2° &10°
Illuminants	D65A,c,D50,D55,D75,F1,F2,F3,F4,F5,F6,F7,F8,F9,F10,F11,F12
Display Data	Spectrogram/Values, Chromaticity Values, Color Difference Values
	/Graph, Pass/Fail Result, Color Offset

Repeatability	Spectral reflectance: Φ25.4mm/SCI, Standard deviation within 0.04%
	(400 nm to 700 nm: within 0.04%)
	Chromaticity value: Φ25.4mm/SCI, Standard deviation within
	ΔE*ab 0.01 Spectral Transmittance: Φ25.4mm/SCI, Standard deviation
	within 0.05% (400 nm to 700 nm: within 0.04%)
	Chromaticity value: Φ25.4mm/SCI, Standard deviation within
	ΔE*ab 0.02
Inter-instrument Error	Φ25.4mm/SCI Within ΔE*ab 0.12(Average for 12 BCRA Series II
	color tiles)
Size	370X300X200mm
Weight	9.6kg
Screen	7" TFT Capacitive Screen-touch Display
Data Port	USB & Bluetooth
Data Storage Capacity	Standard: 5000Pcs;Sample: 40000 Pcs.(One PCS can Include both
	SCI&SCE)
Working Environment	Temperature:0~40°C: Humidity:0~85%(No Condensation)
Storage Environment	Temperature:-20~50°C: Humidity:0~85%(No Condensation)

### **Application**

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Automobile Leather Plastic







Food Laboratory

**Paint**