

STALWART

Precision Colorimeter STR20XE



Introduction

Stalwart STR20XE is a handheld colorimeter based on 45°/0° optical geometry. Its measuring aperture is 20mm. STR20XE measuring aperture is the biggest one in domestic. Meanwhile, it also has high measuring precision. As a member of Stalwart 45°/0° colorimeter, STR20XE is a colorimeter with unique performance. The color measurement results from STR20XE simulate human eyes but its accuracy is several times higher than human eyes. STR20XE 45°/0° optical geometry structures can reflect interactive effect between surface stripe and sample color more effectively than 8°/d colorimeter. STR20XE will eliminate the errors between human eyes and color tester caused by surface stripe when judging tolerance critical value of sample colors. Therefore, STR20XE is widely used in color field.

Features

- 20mm measuring aperture can test objects with surface stripe accurately.
- Vertical structure can test wet surface object or can be soaked into the liquid for testing.
- Double Locating: Illuminating locating and cross locating
- Adopting new optical path and dynamic integration me can test more stable and accurate.
- 45°/0° optical geometry structure, considering the effects of surface features.
- Annular illumination design, suitable for polarizing material.
- Equipped with rechargeable high-capacity Li-ion battery. No need to purchase battery repeatedly.
- Configuring CQCS3 software -- connect PC computer to realize more functions.

Specification

Item	STR20XE
Illuminating/Viewing Geometry	45°/0°
Measuring Aperture	Φ20mm
Special Function	Especially suitable for testing surface stripe and wet products
Locating	Illumination Locating/Cross Locating
Detector	Silicon photoelectric diode
Color Space	CIEL*a*b*C*h* CIEL*a*b* CIEXYZ
Color Difference Formula	ΔE^*ab $\Delta L^*a^*b^*$ $\Delta E^*C^*h^*$
Light Source	D65
Light Source Device	LED blue light excitation
Errors Between Each Equipment	$\leq 0.80\Delta E^*ab$
Storage	100pcs standards 20000pcs samples
Repeatability	Standard deviation within ΔE^*ab 0.08 Average of 30 measurements of standard white plate
Weight	500g
Dimension	205×67×80 mm
Power source	Rechargeable lithium-ion battery 3.7V@3200mAh
Lamp Life	5 years, more than 1.6 million measurements
Charging Time	The first charging me is 8 hours--100% electricity
PC Software	CQCS3 Software
Printer (optional)	Miniature thermal printer