

Sphere Benchtop Spectrophotometers

Ci7800



Measurement Reliability Across the Supply Chain

Like the Ci7600, the Ci7800 can measure opaque, translucent, and transparent samples. However, with tighter inter-instrument agreement and repeatability, it's ideal for manufacturers that need to seamlessly communicate, share, and coordinate color-critical values and specifications. The Ci7800 works with X-Rite Color iQC quality assurance software to quickly identify whether a sample is within tolerance, and if not, provides direct feedback to get it on target. Embedded NetProfiler status lights verify device is optimized for measurement performance.

Versatile Control for Opaque, Transparent, Translucent, and Fluorescent Samples

The Ci7800 offers up to five reflectance and four transmission apertures to measure color and appearance on a wide range of samples in port up, port down, and port forward positions. It can be fitted with various accessories to measure textured materials, odd shapes, liquids, powders, and gels, and uses up to 3 UV filters to control optical brighteners in textiles, plastics, paint, coatings, and paper.

Ensure Operator Confidence and Consistent Measurements

The Ci7800 delivers consistent configuration across all locations and eliminates the potential for error using automated, software-driven setup. The on-board digital camera with preview and active targeting (remove the word to) guarantee accurate sample targeting. It can also capture images for future retrieval so any smudges, scratches or imperfections can be detected and accompany the measurement data for audit.

Specifications

Calibration	White, Zero, UV
Communication Interface	USB 2.0
Dimensions (length, width, height)	56cm, 22cm, 31cm
Embedded NetProfiler Support	Yes
Humidity	5% to 85%, non-condensing
Illumination Spot Size	25mm, 17mm, 10mm, 6mm 3.5mm* (optional)
Inter-Instrument Agreement	$0.08~\Delta E*ab~avg.$
Internal Temperature & Humidity Sensor	Yes

Lamp Life	≥1,000,000 measurements
Lamp Timer	Yes
Laser Transmission Targeting	Yes
Light Source	Pulsed Xenon, D65 calibrated
Measurement Cycle Time	$\approx 2.5 \text{ seconds}$
Measurement Geometry	d/8°
Measurement Spot	19mm, 10mm, 5mm, 2.5mm
Measurement Time	$\approx 2.5 \text{ seconds}$
NetProfiler Support	Embedded
Operating Temperature Range	5°C to 40°C
Package Dimensions (length, width, height)	71cm, 38cm, 53cm
Photometric Range	0 to 200%
Photometric Resolution	0.001%
Reflectance Aperture(s)	4 std / 1 optional
Sample Preview	Door and Video
Service Indicator	Status panel
Shipped Weight	25kg
Short Term Repeatability - White	.01 ΔE*ab RMS on white ceramic

Software Development Kit	XDS4
Spectral Analyzer	2D CCD array holographic grating
Spectral Interval	10 nm (default); 5nm; 20nm
Spectral Range	360nm-780nm
Spectral Reporting	10 nm (default); 5nm; 20nm
Status Panel	Yes
Storage Temperature Range	-20° to 50°C
Transform Support	Embedded
Transmission Aperture(s)	4
Voltage	100 to 240 VAC / 50 to 60Hz
Warranty	12 months
Weight	20.5kg