



## Sphere Benchtop Spectrophotometers

Ci7860



### **Establish the Strictest Color Standards**

Creating standards requires the most advanced color measurement instrument available. The Ci7860 delivers 25% tighter specifications than any other industrial instrument, consuming less of the tolerance allocated for color variation with instrument variability. Built-in temperature and humidity sensors ensure the environment is suitable, and embedded NetProfiler status lights verify the device is optimized for each measurement. Standards created with the Ci7860 can be used for each stage of the product development process, from formulation to final production to quality control.

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

The Ci7860 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 Maximize Productivity

The Ci7860 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	0.06 $\Delta E^*_{ab}$ avg.
Internal Temperature & Humidity Sensor	Yes

<b>Lamp Life</b>	≥1,000,000 measurements
<b>Lamp Timer</b>	Yes
<b>Laser Transmission Targeting</b>	Yes
<b>Laser Transmission Targeting</b>	Yes
<b>Light Source</b>	Pulsed Xenon, D65 calibrated
<b>Measurement Cycle Time</b>	≈ 2.5 seconds
<b>Measurement Geometry</b>	d/8°
<b>Measurement Spot</b>	19mm, 10mm, 5mm, 2.5mm
<b>Measurement Time</b>	≈ 2.5 seconds
<b>NetProfiler Support</b>	Embedded
<b>Operating Temperature Range</b>	5°C to 40°C
<b>Package Dimensions (length, width, height)</b>	71cm, 38cm, 53cm
<b>Photometric Range</b>	0 to 200%
<b>Photometric Resolution</b>	0.001%
<b>Reflectance Aperture(s)</b>	4 std / 1 optional
<b>Sample Preview</b>	Door and Video
<b>Service Indicator</b>	Status panel
<b>Shipped Weight</b>	25kg

<b>Short Term Repeatability - White</b>	.01 $\Delta E^*_{ab}$ RMS on white ceramic
<b>Software Development Kit</b>	XDS4
<b>Spectral Analyzer</b>	2D CCD array holographic grating
<b>Spectral Interval</b>	10 nm (default); 5nm; 20nm
<b>Spectral Range</b>	360-780 nm
<b>Spectral Reporting</b>	10 nm (default); 5nm; 20nm
<b>Status Panel</b>	Yes
<b>Storage Temperature Range</b>	-20° to 50°C
<b>Transform Support</b>	Embedded
<b>Transmission Aperture(s)</b>	4
<b>Voltage</b>	100 to 240 VAC / 50 to 60Hz
<b>Warm Up Time</b>	None
<b>Warranty</b>	12 months
<b>Weight</b>	20.5kg