

PCM2 PROMETHEUS SERIES

Colorimeter

Discover the fastest display colorimeter series ever build. The Prometheus PCM2 colorimeters define the new standard for high-speed display color measurements. A new patent optical engine makes 100 % efficient use of the measurement spot area. The result is an unrivaled sensitivity for super-fast measurements of low luminance values with excellent signal-to-noise ratio.

Devices with multiple lens options from 5 mm to 27 mm and acceptance angles of maximum $\pm 6^\circ$ are suitable for any display technology, regardless of the viewing angle characteristics.

Highlights

Impressive dynamic range:
0.000 025 cd/m² to 30 000 cd/m²

Lens options from 5 mm to 27 mm

High-speed Flicker function (XYZ):
Up to 600 000 samples/second

Powerful MCU enables internal
JEITA, FMA and custom flicker
calculation

Time based FMA flicker
calculation (variable refreshment
rate) by means of a FIR filter

Highly accurate color
measurement according to
human eye (CIE 1931 or
CIE 170-2:2015)



ADMESY

admesy.com/series/pcm2-pcm2x

Unmatched Speed & Color Accuracy



Admesy has been leading with the fastest display colorimeter for multiple generations. Constantly improving and creating products that stand out in quality, innovation and speed, we have made the impossible possible. By enhancing our best predecessor model's sensitivity fourfold, we are pushing the limits again with the PCM2 colorimeters. This allows to accurately measure luminance values down to 0.000 025 cd/m². These impressive improvements were possible by a patent-pending new optical splitting technology with virtually no light loss, which uses the complete light hitting the measurement spot.

In addition new electronics and high efficiency sensors contribute to the remarkable sensitivity.

The PCM2 colorimeters are not only super-fast, but at the same time highly accurate. This is achieved by Admesy's integral approach to optimize all parts of a measurement device, where we control each parameter. The used components are custom high-end lenses optimized to achieve the best possible measurement performance in regards of accuracy, repeatability, speed and reliability. Last not least our in-house made filters take into account the complete optical path to achieve the highest accuracy possible.

Specifications

Model	Prometheus PCM2 and PCM2X Colorimeter
Optical systems	Collimating lens: 10 mm, 27 mm Focussing lens: 5 mm
Photo detector	3 silicon photo diode using XYZ interference filter
Spectral response	CIE 1931 2° or CIE 170-2:2015 2° or 10° color matching functions
Luminance accuracy	From 1.5 %, depending on the luminance and model, see detailed specs
Chromaticity accuracy	From 0.0015 CIE _{xy} , depending on the on luminance and model, model dependent, see detailed specifications
Measurement speed	Up to 600k samples/second, depending on the luminance and frame frequency
Interfaces	High speed USB, RS232, Ethernet, Trigger connections
Measurement parameters	XYZ, Yxy, Yuv, correlated colour temperature (CCT), dominant wavelength (Afm, JEITA, custom), Flicker, Response time

Download the brochures with detailed specifications from admesy.com/downloads

ADMESY
info@admesy.com