

Prometheus^{SERIES}

Prometheus X 27 mm Colorimeter

The Prometheus Series provides a complete solution for different spot measurements on displays. Customized to fit your needs, the Prometheus X 27 mm colorimeter features a high-speed Y flicker channel capable of up to 800 000 samples per second. The integration of a colorimeter and an ultra-high sample rate waveform analyzer is unique. This setup allows for the fastest and most accurate color measurement while capturing the signal waveform in the highest resolution possible.

Highlights

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

Huge dynamic range:
0.0001 to 10 000 cd/m²

Fast color measurements.
Low luminance values, down to 0.0001 cd/m² in only 1 second.

Separate Y channel for detailed waveform analysis, speed up to 800 000 samples per second

Autorange function

Powerful MCU enables internal JEITA flicker calculation

Mechanical shutter

Supports Windows, Linux and macOS

Directly supported in Labview, LabWindows, Visual Studio (C#, C++), Python and Matlab via VISA library



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admesy.com/series/prometheus

Color Accuracy & High Speed



Prometheus X 27 mm was developed to meet the needs of our customers. Our highly accurate inhouse made filters are key to the accuracy achieved with this versatile colorimeter. A separate Y channel allowed us to integrate measurement capabilities of a staggering 800 000 samples per second. Up to 1 000 000 samples can be saved over a maximum measurement time of 50 seconds. Prometheus X 27 mm can measure as low as 0.0001 cd/m² or using the UHL (ultra-high luminance) mode go up to 10 000 cd/m², both for XYZ or Y only.

Admesy is committed to designing and producing devices that prioritize accuracy, ease of use and speed. To achieve this goal, the Prometheus colorimeter provides a distinctive mix of highspeed performance and precise color measurement abilities enclosed in a sturdy package.

Just like all Admesy series, Prometheus X 27 mm is durable for continuous 24/7 operation, simple to integrate into production settings, and provides a great price-performance ratio.

Specifications

Model	Prometheus X 27 mm Colorimeter
Optical systems	Collimating lens: 27 mm Wide Angle Acceptanle angle: 10° (± 5°)
Photo detector	4 silicon photo diode using XYZ interference filter
Spectral response	Approximates CIE 1931 or CIE 170-2:2015 color matching functions
Luminance accuracy	From 1.5 %, depending on the luminance, see detailed specs
Chromaticity accuracy	From 0.0015 CIExy, depending on the on luminance, see detailed specs
Measurement speed	Up to 45 samples/second, depending on the luminance
Interfaces	High speed USB, RS232, Ethernet, Trigger connections
Measurement parameters	XYZ, Yxy, Yuv, correlated color temperature (CCT), dominant wavelength, Flicker, Response time
Size	(HxWxD) 90 mm x 70 mm x 220 mm (without lens system)
Weight	~ 1 000 g
Operating temperature	10 °C – 35 °C

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

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