Prometheus SERIES

Colorimeter

Prometheus is your solution for all types of spot measurement on displays. Developed to your needs, this colorimeter series adds flicker and response time measurement options to the color measurements. Like all Admesy series, Prometheus is robust for 24/7 use, easy to integrate in production environments and offers an excellent price-performance ratio.

Highlights

Highly accurate color measurement according to human eye (CIE 1931)

4 collimating and 2 focussing lens options from 2.1 mm to 27 mm

Fast color measurement even at low luminance levels

Flicker luminance (Y) function: 3125 samples/second

Autorange function

Powerful MCU enables internal JEITA flicker calculation

Mechanical shutter

Fiber connection possible

Supports Windows, Linux and macOS

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



Speed, Versatility & Ease of Use



Admesy strongly believes in developing and manufacturing devices where ease of use and speed are key factors. In order to achieve these aspects the Prometheus colorimeter offers a unique combination of high speed and accurate color measurement capabilities packed in a robust package.

Prometheus is available with 6 different lens options: The 27 mm wide-angle Prometheus is the fastest colorimeter in the world and a perfect choice for the measurement of any type of display, combining incredible speed with near perfect XYZ filter characteristics and low luminance performance.

When smaller measurement spots are important, two 10 mm versions with different acceptance angles or a 20 mm version are there to cover your needs.

For super small measurement spots the Prometheus 2.1 mm focussing lens is the perfect colorimeter for camera-under-display testing, through-display face ID recognition, or any other measurement that requires extreme precision work. This colorimeter is also available with pointer. A bit bigger than his 2.1 mm sibling is the Prometheus 5 mm focussing lens. Both colorimeters are perfect for measuring small areas, like a smartwatch display.

Specifications

Model	Prometheus Colorimeter
Optical systems	Collimating lens: 10 mm, 10 mm Wide Angle, 20 mm, 27 mm Wide Angle Focussing lens: 2.1 mm, 5 mm
Photo detector	3 silicon photo diode using XYZ interference filter
Spectral response	Approximates CIE 1931 color matching functions
Luminance accuracy	From 1.5 %, depending on the luminance and model, see detailed specs
Chromaticity accuracy	From 0.0015 CIExy, depending on the on luminance and model, 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 colour temperature (CCT), dominant wavelength, Flicker, Response time
Size	(HxWxD) 53 mm x 70 mm x 190 mm (without lens system)
Weight	~ 850 g
Operating temperature	10 °C - 35 °C

