

# Prometheus<sup>SERIES</sup>

## Prometheus LF 17 mm Luminance & Flicker Meter

The Prometheus Series provides a complete solution for conducting various spot measurements on displays. The Prometheus LF 17 mm is a specialized Luminance and Flicker Meter that combines high speed with a wide dynamic range. Its sole purpose is to measure luminance and flicker, achieving an impressive speed of up to 800 000 samples per second. It excels in measuring both extremely low and very high luminance levels. As the successor to the Asteria model, the Prometheus LF 17 mm is designed for top-tier performance by implementing vastly improved Y filters and a higher sensitivity.

### Highlights

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

17 mm lens for high sensitivity

Huge dynamic range:  
0.005 to 16 000 cd/m<sup>2</sup>

Extreme fast luminance measurements even at low luminance values

Flicker luminance Y channel:  
800 000 samples / second

Autorange function

Powerful MCU enables internal JEITA flicker calculation

Supports Windows, Linux and macOS

SDK available for virtual any programming language



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[admesy.com/series/prometheus](https://admesy.com/series/prometheus)

# With the Speed of Light



Flicker measurements and waveform assessment are crucial in the quality control of display production. Variations in brightness due to flicker can negatively impact the viewing experience, so monitoring and controlling flicker is essential for maintaining high-quality displays. This also assures the highest customer satisfaction, because displays with flicker issues can cause discomfort, eye strain, and even headaches for users. Especially for applications where visual comfort and safety are critical (e.g., medical displays, automotive displays) flicker measurements ensure compliance with standards and regulations, avoiding potential legal issues and ensuring display safety. Finally by understanding the waveforms, manufacturers can improve response times, reduce motion blur, and enhance overall display performance.

Admesy is dedicated to developing and producing devices that prioritize accuracy, ease of use, and speed. The Prometheus LF 17 mm luminance meter is crafted to provide a distinctive blend of high-speed operation and precise luminance measurement features housed in a durable enclosure to fulfill this mission.

Like other products in the Admesy lineup, the Prometheus LF 17 mm variant is engineered for continuous operation, seamless integration into manufacturing settings, and offers outstanding cost-effectiveness.

## Specifications

Model	Prometheus LF 17 mm Luminance and Flicker Meter
Optical systems	Collimating lens: 17 mm Wide Angle Acceptance angle: 20° ( $\pm 10^\circ$ )
Photo detector	Single diode using an interference filter to match the CIE1931 photopic response
Luminance accuracy	2 %, see detailed specs
Sampling frequency	Up to 800 000 samples/ second (can be decreased to improve S/N)
Memory for saving sampling data	1 000 000 samples
Maximum measurement time	Up to 50 seconds
Interfaces	High speed USB, RS232, Trigger connections
Measurement parameters	Luminance Y, flicker and response time
Weight	~ 450 g
Operating temperature	10 °C – 35 °C

Download the brochures with detailed specifications from [admesy.com/downloads](https://admesy.com/downloads)

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