Compatible with PWM-controlled sources

Illuminance Meter

T-10A series

Illuminance meters that conform to JIS AA Class and DIN Class B requirements. Compatible with new, next-generation light sources including PWM-controlled sources.

Can be used for simple, inexpensive multi-point measurements. Mini receptor model also available to enable illuminance measurements even in narrow spaces.
For simple but accurate illuminance measurements. Makes creating illuminance measurement systems such as multi-point measurement systems easy!

Reliable, worry-free illuminance meters that conform to JIS AA Class and DIN Class B

Illuminance Meters T-10A and T-10MA conform to Class AA of JIS C 1609-1:2006 "Illuminance meters Part 1: General measuring instruments" and DIN 5032 Part 7 Class-B "Photometry; classification of illuminance meters and illuminance meters" requirements to provide high-accuracy, high-reliability, worry-free measurements.

Illuminance meters conforming to these standards are required for measurements of general illumination light sources, white LED lamps for illumination, etc. in a variety of industrial fields.

Removable receptor

The receptor and main body can be detached from each other and then connected using a LAN cable, making it easy to install as part of an inspection system.

Compatible with PWM-controlled lighting. Enables measurements of next-generation light sources.

Conventional illuminance meters often cannot accurately measure PWM-controlled light sources, but the T-10A series of illuminance meters can be used to accurately measure even such light sources.

Easy, inexpensive multi-point measurement (2 to 30 points).

Illuminance distribution of a projector etc. can be easily measured with a single instrument and several receptors.

Multi-point illuminance measuring system

- 5-point example: Architectural lighting, etc.
- 9-point example: Projectors, etc.
- 25-point example: Street lighting, etc.

Main applications

- Government testing organizations
- Research/inspection at illumination equipment makers
- Maintenance at factories, offices, hospitals, etc.
- Illuminance control of security lighting, street lighting, etc.
- As sensor for equipment measuring light-distribution characteristics, etc.

Waterproof illuminance meters that conform to JIS AA Class and DIN Class B

T-10A
T-10MA (Cord length: 1 m)
T-10WSA (Cord length: 5 m)
T-10WLA (Cord length: 10 m)

Conforms to JIS AA Class and DIN class B

Enables illuminance measurements of small areas.

Can be used for general measurements of illuminance.

Can be used for illuminance measurements in narrow spaces where the standard receptor won’t fit.

It can also be easily installed on various kinds of equipment or jigs for measuring light levels such as illumination.

The mini receptor and cord are both waterproof, so they can be used for measurements in water.

They can be used for illuminance control for fishery-related applications (such as fish farming, etc.) or for measuring outdoor illumination on rainy days.
multi-point measurement systems easy!

**Data Management Software T-S10w (Optional accessory)**

Convenient, easy-to-use Excel® add-in software

Reads measurement data from T-10A series Illuminance Meters directly into Excel®. Further processing of data can then be performed easily using the various functions of Excel®.

### Main specifications of Data Management Software T-S10w

<table>
<thead>
<tr>
<th>Type</th>
<th>Add-in for Excel® [Excel® is required to use the add-in]</th>
</tr>
</thead>
</table>

---

**Cosine Correction Characteristics**

Since the brightness at the measurement plane is proportional to the cosine of the angle at which the light is incident, the response of the receptor must also be proportional to the cosine of the incidence angle. For Konica Minolta Illuminance Meters T-10A/10MA, the cosine response $f_2$ is within 3%.

### About PWM-controlled lighting

PWM is the abbreviation of Pulse Width Modulation, and refers to the method of controlling signal intensity by controlling the ratio between the ON period and OFF period of a pulse signal.

A pulse signal is a signal which repeatedly alternates between ON and OFF, and the percentage of ON period during a single cycle is referred to as the "duty cycle". PWM-controlled lighting is a method for controlling the brightness of a lamp by controlling the duty cycle (lit time) of light from a pulse-emission source. As the lit time becomes longer, the lamp becomes brighter, and conversely, as the lit time becomes shorter the light becomes darker.

---

**Konica Minolta’s Illuminance Measurement Trio**

Konica Minolta’s line of instruments for measuring illuminance includes not only the Illuminance Meter T-10A which can measure PWM-controlled light sources, but also the Chroma Meter CL-200A which can measure color temperature and the Illuminance Spectrophotometer CL-500A which can measure color-rendering properties.

### Illuminance Meter T-10A

Conforms to DIN Class B and JIS AA Class. Capable of accurately measuring next-generation lamps including PWM-controlled lighting. Multiple receptors can be used for easy, low-priced, multi-point measurement, and a miniature receptor model is also available for easily measuring illuminance in narrow spaces.

### Chroma Meter CL-200A

A de facto standard industry standard for color-temperature measurement. Can also perform illuminance measurements (JIS AA Class). Compact and lightweight with removable receptor connectable with extension cables. Includes simple, convenient PC software as standard accessory.

### Illuminance Spectrophotometer CL-500A

The first illuminance spectrophotometer to conform to both JIS AA Class and DIN Class B requirements. Compact, hand-held type can easily be installed in inspection equipment and is ideal for evaluating color-rendering properties. Includes simple, convenient PC software as a standard accessory.

* Both CL-200A and CL-500A can measure PWM-controlled lighting.