

**OPTICAL  
POWER  
MONITORING**

# UV POWER METER C9536 / H9535 SERIES

**For absolute optical power measurement**



Left: Controller C9536 Right: Sensor Head H9535 Series

## OVERVIEW

The C9536/H9535 series are UV power meters that directly measure UV light at specific wavelengths. The H9535 (sensor head) uses a UV sensor (photo-tube) that ensures stable UV measurement over a long period of operation and is calibrated in combination with the C9536 (controller) based on NIST standards.

The detachable sensor head contains a rechargeable battery for UV detection and data memory, allowing remote measurement such as on a belt conveyor or in locations where cable routing is difficult.

In addition to external control via the RS-232C interface, an analog control is available for recording on a data recorder, etc.

## FEATURES

### ●Absolute optical power monitoring (mW/cm<sup>2</sup>)

Sensitivity-calibrated data at each wavelength (126 nm, 146 nm, 172 nm, 222 nm, 185 nm, 254 nm) is supplied with the power meter. We also append a Certificate of Calibration.

### ●Detachable sensor head / remote measurement

The detachable sensor head allows remote measurement on a conveyor belt of UV oven, etc.

### ●Thin, flat sensor head: 14 mm thickness

Allows the sensor head to be used closer to a light source.

### ●External control: RS-232C

The main unit has RS-232C interface for external control.

### ●Stable performance at deep UV since no optical filters are used

Specific UV light can be directly detected without any optical filter.

### ●Wide light incident angle

Acceptable light incident angle is close to  $\cos \theta$ , even without using diffusers.

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# APPLICATIONS

- Excimer lamp monitoring
- Low pressure mercury lamp monitoring
- UV light monitor
  - UV furnace (coating, adhesive, printing)
  - UV cleaning, UV sterilization
  - Improving surface characteristics

# SPECIFICATIONS

## Controller: C9536

Display	Liquid crystal digital display [irradiance (mW/cm <sup>2</sup> ) / integrated optical power (mJ/cm <sup>2</sup> ): Max.effective 4 digits]
Function	Real time / Integration / Peak hold / Temperature
Integration Time Setting	1 s to 5 min (1 s step)
Analog Output	0 V to +2 V
External Interface	RS-232C
Power Requirement	Rechargeable battery (built-in) / AC adapter (AC100 V to 240 V) (supplied)
Operating Ambient Temperature / Humidity	0 °C to +45 °C / Below 80 % (no condensation)
Storage Temperature / Humidity	-20 °C to +50 °C / Below 80 % (no condensation)
Weight	Approx. 285 g

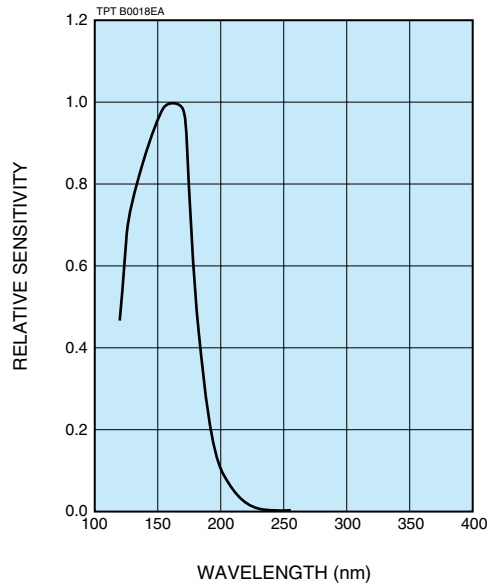
## Sensor Head : H9535 Series

Type	H9535-126	H9535-146	H9535-172	H9535-222	H9535-185	H9535-254	Unit
Calibrated Wavelength	126	146	172	222	185	254	nm
Applicable light Source	Excimer lamp				Low-pressure mercury lamp		—
Sensitive Area	φ6						mm
Optical Power Measurement Range	Irradiance [0.001 mW/cm <sup>2</sup> to 200 mW/cm <sup>2</sup> ]						—
Operating Ambient Temperature / Humidity	0 °C to +60 °C / Below 80 % (no condensation)						—
Storage Temperature / Humidity	-20 °C to +60 °C / Below 80 % (no condensation)						—
Weight	Sensor Head: Approx. 60 g / Cable: Approx. 110 g						—

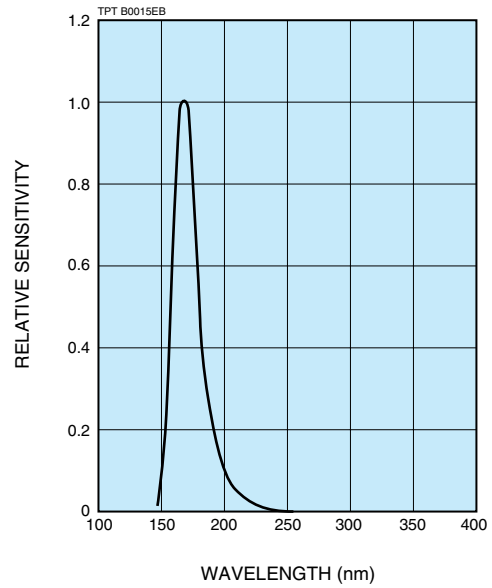
C9536 and H9535 series are not available to vacuum operation.

# SENSOR CHARACTERISTICS

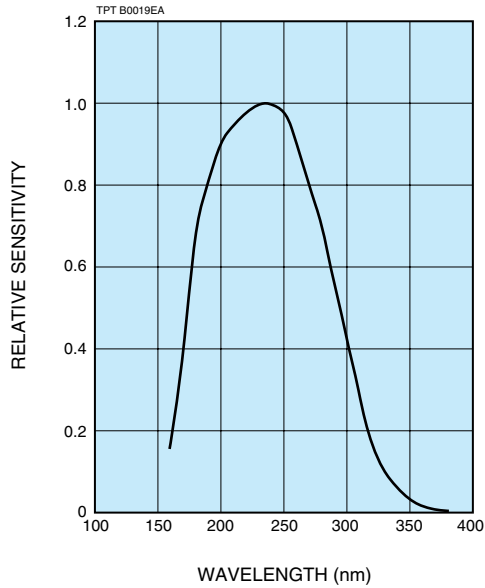
## H9535-126, -146 Spectral Response



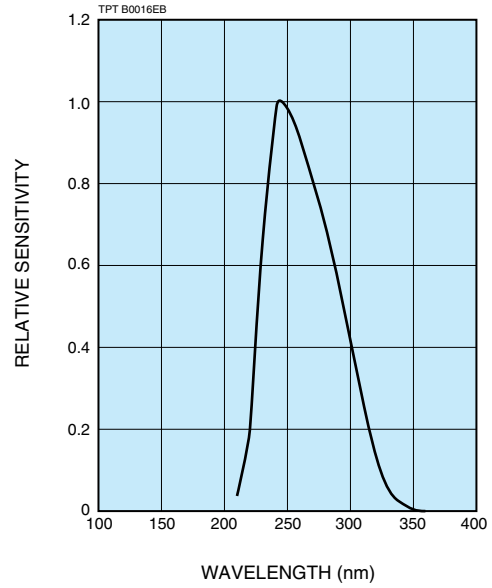
## H9535-172, -185 Spectral Response



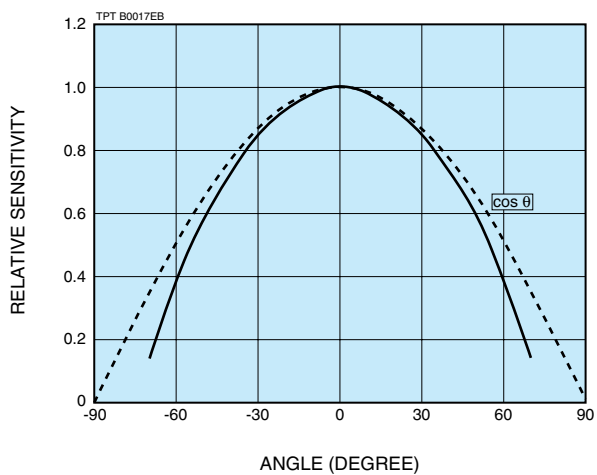
## H9535-222 Spectral Response



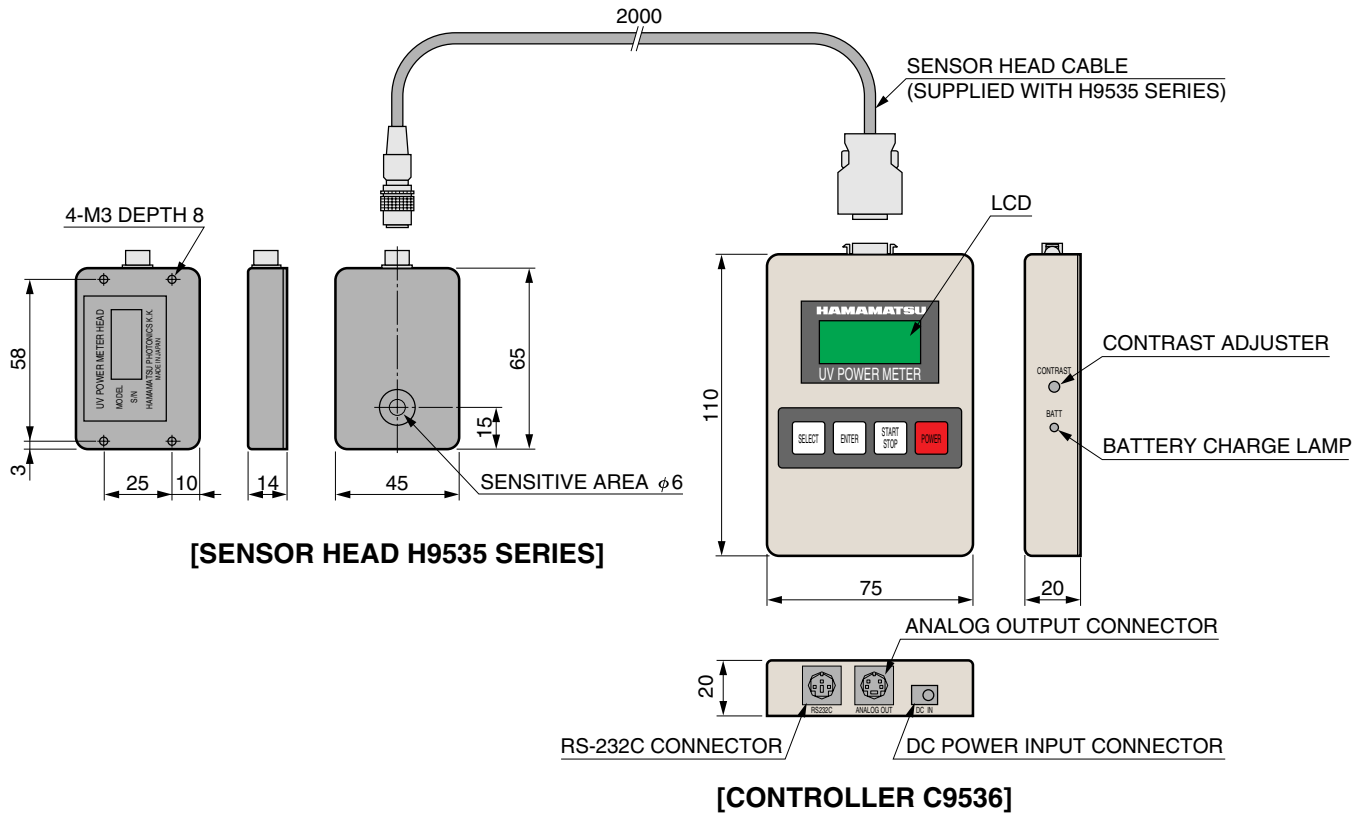
## H9535-254 Spectral Response



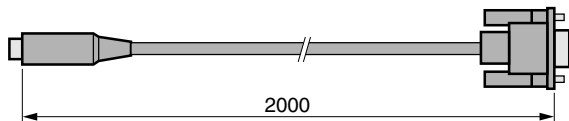
## Angular Response



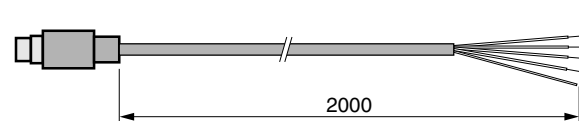
# DIMENSIONAL OUTLINES (Unit: mm)



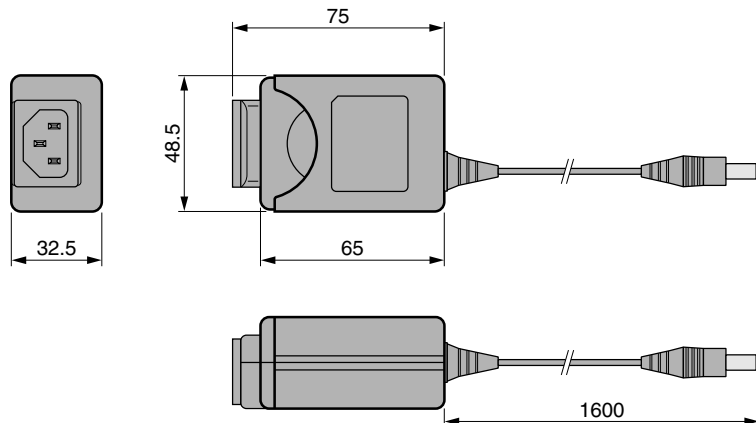
**[RS-232C CABLE] (SUPPLIED WITH C9536)**



**[ANALOG OUTPUT CABLE] (SUPPLIED WITH C9536)**



**[AC ADAPTER] (SUPPLIED WITH C9536)**



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