

**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 (phototube) that ensures stable UV measurement over a long period of operation and is calibrated in combination with the C9536 (controller) based on national 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/cm²)

Sensitivity-calibrated data at each wavelength (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.

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 ²) / integrated optical power (mJ/cm ²): 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 +40 °C / Below 80 % (no condensation) |
| Storage temperature / humidity | -20 °C to +50 °C / Below 80 % (no condensation) |
| Weight | Approx. 285 g |

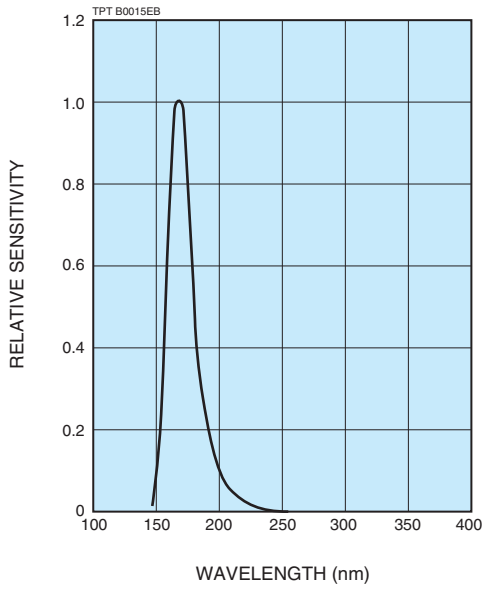
Sensor head : H9535 series

| Type | H9535-172 | H9535-222 | H9535-185 | H9535-254 | Unit |
|--|--|-----------|---------------------------|-----------|------|
| Calibrated wavelength | 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 ² to 200 mW/cm ²] | | | | — |
| 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 | | | | — |

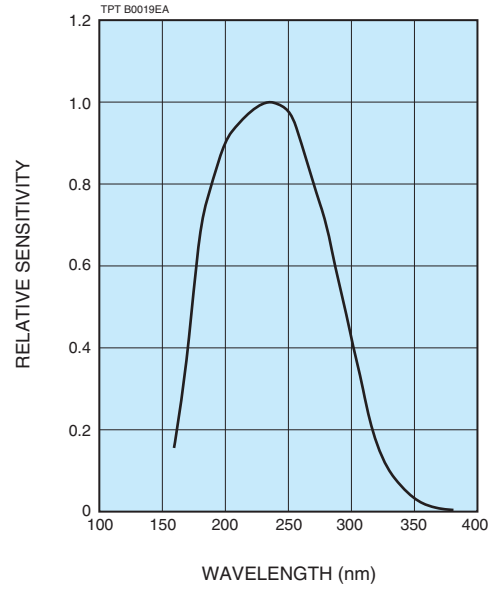
C9536 and H9535 series are not available to vacuum operation.

SENSOR CHARACTERISTICS

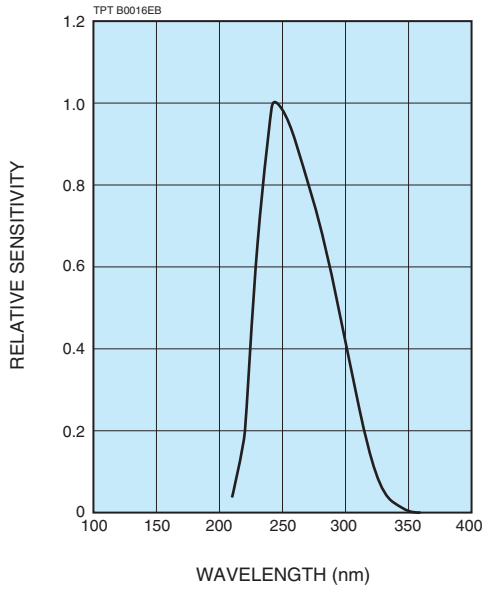
H9535-172, -185 Spectral response



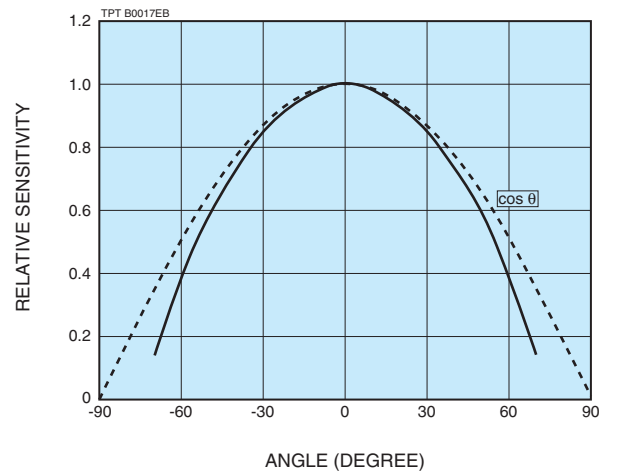
H9535-222 Spectral response



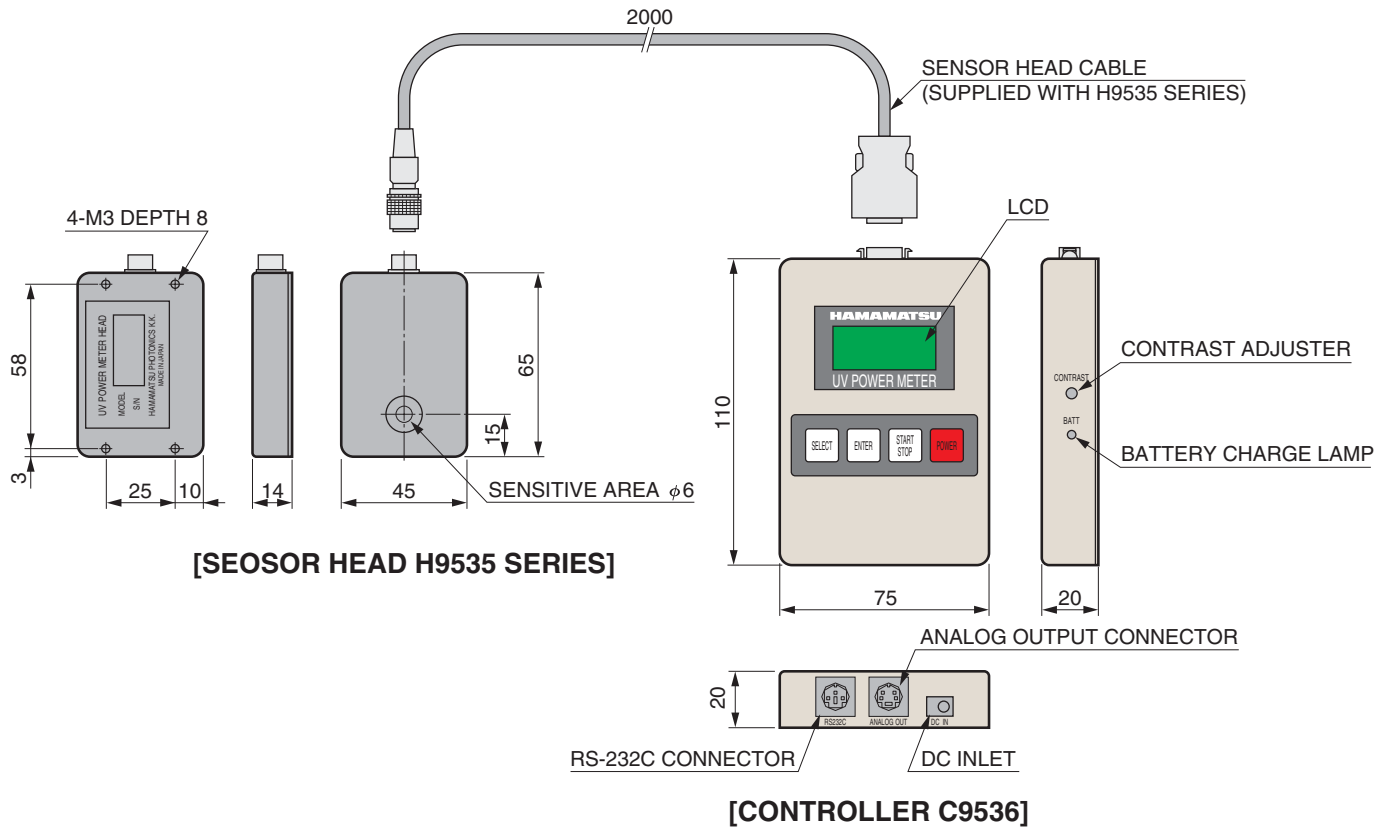
H9535-254 Spectral response



Angular response



DIMENSIONAL OUTLINES (Unit: mm)



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