The H7421 series is a compact photon counting head consisting of the metal package PMT with a cooler, a high speed photon counting circuit and a high voltage power supply. The H7421-40 utilizes a GaAsP semiconductor photocathode which detects single photons from 300 to 720nm in wavelength. The H7421-50 utilizes a GaAs semiconductor photocathode which detects single photons from 380 to 890nm in wavelength. Both types have higher Quantum Efficiency compared to the conventional alkali metal Photocathode in their peak wavelength.

By using a temperature monitor output thermistor, an operating temperature of the H7421 series can be monitored. The output signal is handled easily by simple connecting to a counter so that it is a TTL mode.

To obtain a better performance, the H7421 should be kept between +5°C to +35°C in operation.

**FEATURES**

- **H7421-40 (GaAsP)**
  : Higher Photon Detection Efficiency
- **H7421-50 (GaAs)**
  : Wide Spectral Range
- Sensitive Area: 5 mm in Diameter
- Easy Operation

**APPLICATIONS**

- Chemiluminescence detection
- Bioluminescence detection
- Fluorescence detection
- Other low level light detections
INTERNAL DIAGRAM
PHOTON COUNTING HEAD H7421

POWER INPUT for PELTIER COOLER THERMISTOR

AMPLIFIER COMPARATOR PULSE SHAPER

OUTPUT

RL = 50 Ω

TTL POSITIVE LOGIC

GND

POWER INPUT for MAIN UNIT

Dimensional Outline (Unit: mm)

PHOTON COUNTING HEAD H7421

Subject to local technical requirements and regulations, availability of products included in this promotional material may vary. Please consult with our sales office.

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PHOTON COUNTING HEAD H7421 SERIES