

Features:

- Centralization of threat data from multiple sources.
- Detects, analyzes, and locates all radiation threats.
- Highly configurable: fixed, mobile, or venue-driven.
- Highly sensitive probes provide fast detection of hidden radioactive sources.
- Reduces innocent alarms and enhances sensitivity through the use of NBR technology.
- Modular, rugged design.
- Ease of maintenance.
- Secure wireless communications.
- Fully integrated GPS with mapping.
- Self-diagnostic capabilities.
- No radioactive sources required for proper operation
- Supports detector types.
- Highly-scalable, flexible platform which provides a clear path to additional centralized detection and analysis Multiple power options: battery power up to 3 hours and Vehicle AC power enabled.



Description:

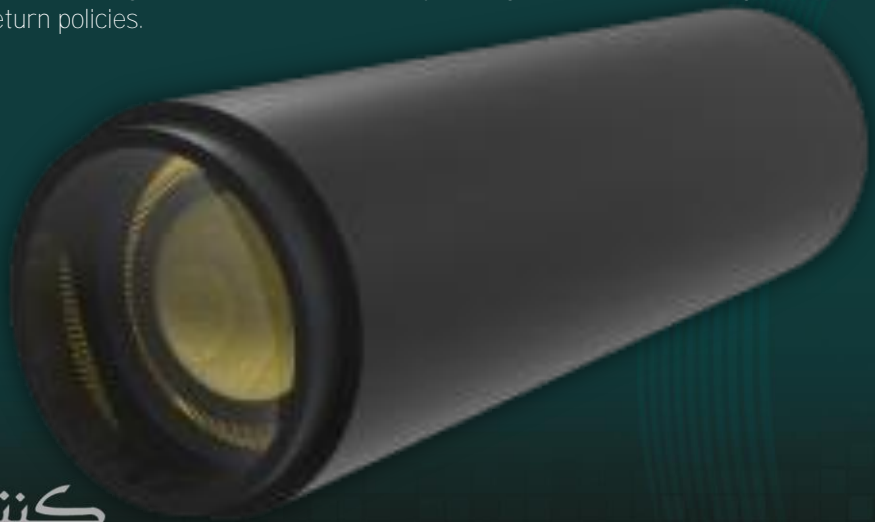
Photomultiplier Tube (PMT) modules combine a PMT with voltage divider, CSP, Amplifier and often other signal processing electronics. A variety of PMT modules are available which differ in output signal format (current or voltage), spectral response, amplifier gain and bandwidth, as well as the size of the active area. 8mm Voltage and Current Output types feature 8mm head-on photomultiplier tubes, 1V/ μ A 20 kHz low noise amplifiers, and can be fiber-coupled using either SMA Adapter or FC Adapter. 8mm Current Output types feature low ripple noise and fast settling times. 15mm Voltage Output types feature 15mm head-on photomultiplier tubes and 0.1V/ μ A 200 kHz amplifiers. Current Output type is a high gain (10) PMT module suitable for use in broadband spectrophotometers and other precision photometric instruments. Rectangular active area PMT modules deliver high sensitivity with gains as high as 10 and fast response times.

Suitable for low-light-level detection applications, the photomultiplier tube (PMT) provides extremely high sensitivity and ultrafast response. PMTs consist of a photocathode followed by a series of dynodes and an electron collector (anode) in a highly evacuated glass or metal can envelope. When light enters the photocathode of a photomultiplier tube, photoelectrons are emitted from the photocathode. These photoelectrons are multiplied by secondary electron emission through the dynodes and then collected by the anode as an output pulse. The gain of the PMT, that is the ratio of anode output current to the photoelectric current from the photocathode, is directly related to the supply voltage. PMTs generally operate with a bias between photocathode and anode of 500V to about 1200V DC or higher. The photocathode composition determines the spectral response, the quantum efficiency at each wavelength, the overall uniformity of photomultiplier sensitivity, and the dark current.

Warning: This product is extremely light sensitive. Exposing aperture to room light will permanently damage product. Should only be used with sources less than 1 Nano-watt. Housings are also fragile, and will be permanently damaged if dropped. Damages due to above reasons are not covered under warranty or return policies.

Specification:

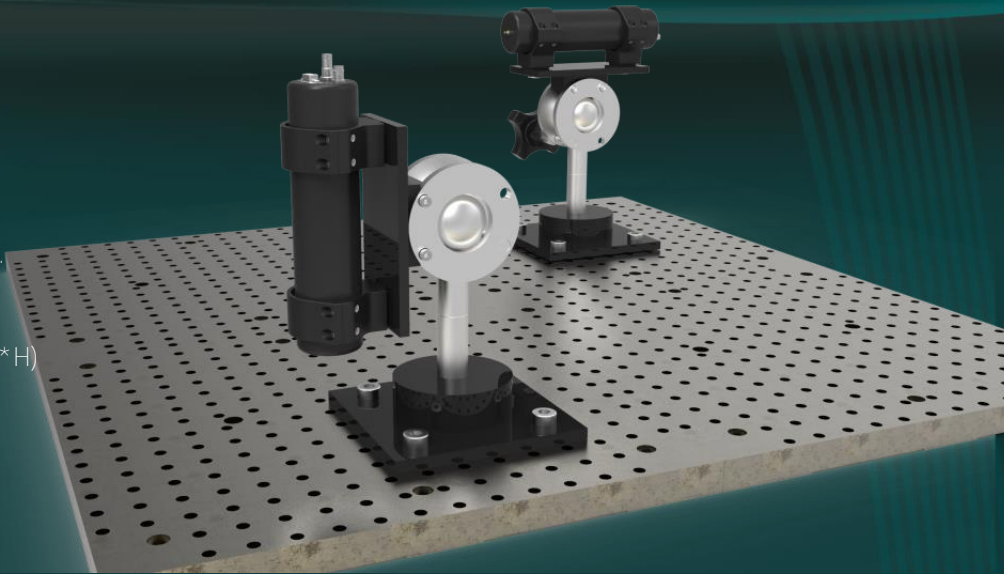
- Input Current (mA): 40
- Input Voltage (V): ± 11.5 to ± 15.5
- Control Voltage (V): +0.25, +0.9, +1.0
- Radiant Sensitivity Anode: 7.4×10 A/W
- Radiant Sensitivity Cathode (mA/W): 74
- Peak Response Wavelength (nm): 400
- Spectral Response (nm): 185 900
- Sensitivity Adjustment: 1:104
- Gain (dB): 1×10^7
- Output Signal: 100 μ A
- Ripple (mV): 0.5
- Active Area (mm): 4 x 20



- Dark Current I (nA): 3
- Transit Time (ns): 22
- Settling Time (seconds): 0.5
- Rise Time (ns): 2.2
- RoHS: E

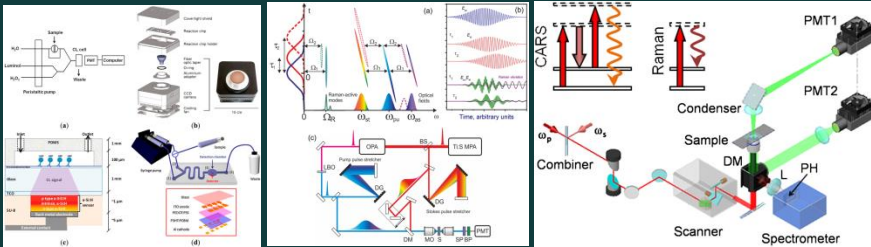
PERFORMANCE

- Operating Temperature: +5°C to +50°C.
- Storage Temperature: -20°C to +50°C.
- Weight (g): 220
- Dimensions (mm): 100*200*20 (W*L*H)

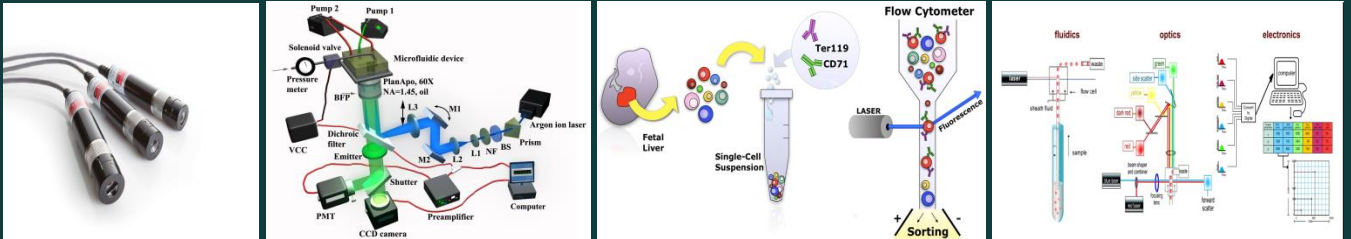


Application

- Raman spectroscopy



- flow cytometry



- Fluorescence detection



- DNA chip analyzers

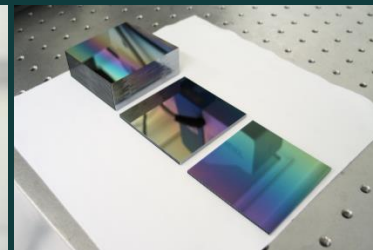




- radiation monitoring



- semiconductor wafer inspection



- laser range finding



- Broadband spectrophotometers and other photometric instruments



STANDARD ACCESSORIES

- PMT Base 2315 NaI Crystal
- User guide DVD
- Delivered in hard case with foam insert

