

Internal CPU/IF

Photon Counting Head H7467



The H7467 is a photon counting head designed for photon counting by simply connecting to a PC (personal computer). The H7467 houses a metal package photomultiplier tube, high-voltage power supply circuit, photon counting circuit, 20-bit counter and microprocessor in a compact package. Data transfer, measurement time and other necessary adjustments are controlled by commands from the PC through the RS-232C interface. The photon counting circuit discrimination level and the high voltage supply for photomultiplier tube are preadjusted to optimum levels prior to shipment so that the H7467 can be easily operated by simply supplying +5 V.

Product Variations

Type No.	Spectral Response	Features
H7467	300 nm to 650 nm	Internal photon counting circuit, counter, microprocessor and RS-232C interface allow control and data transfer by PC.

Specifications

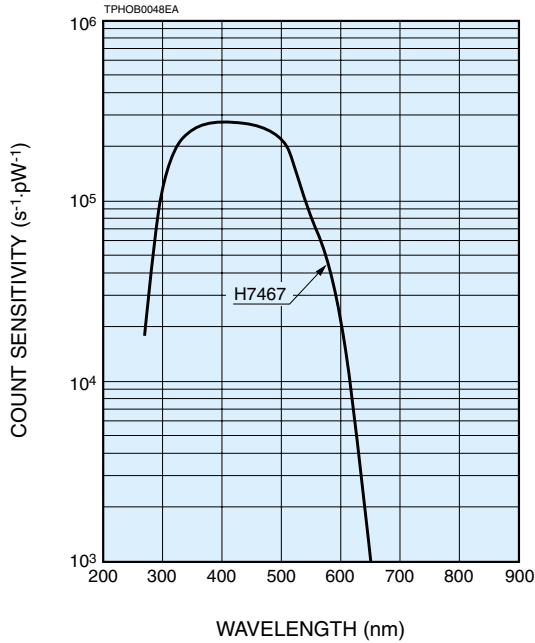
Parameter	H7467	Unit	
Input Voltage	+4.5 to +5.5	V	
Max. Input Voltage	6	V	
Max. Input Current	180	mA	
Effective Area	$\phi 8$	mm	
Peak Sensitivity Wavelength	420	nm	
Count Sensitivity	300 nm	1.2×10^5	$s^{-1} \cdot pW^{-1}$
	400 nm	2.7×10^5	
	500 nm	2.2×10^5	
	600 nm	2.1×10^4	
Count Linearity *1	1.5×10^6	s^{-1}	
Dark Count *2	Typ.	100	s^{-1}
	Max.	500	
Pulse-pair Resolution	70	ns	
Interface	RS-232C, 9600 baud, Parity none, 8 data bit, 1 stop bit	—	
Gate Time	10 to 10 000 (10 Step)	ms	
Operating Ambient Temperature	+5 to +40	$^{\circ}C$	
Storage Temperature	-20 to +50	$^{\circ}C$	
Weight	120	g	

*1: Random pulse, at 10 % count loss

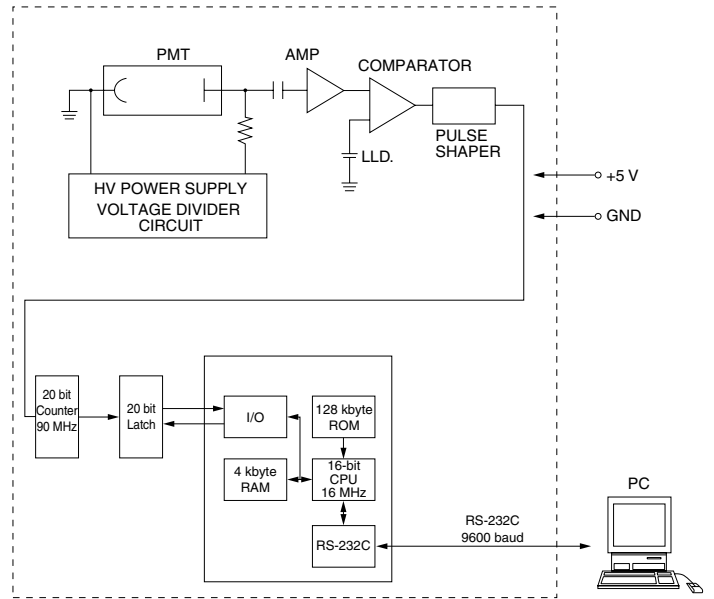
*2: After 30 minute storage in darkness

Photon Counting Head with CPU+Interface

Characteristic (Count sensitivity)

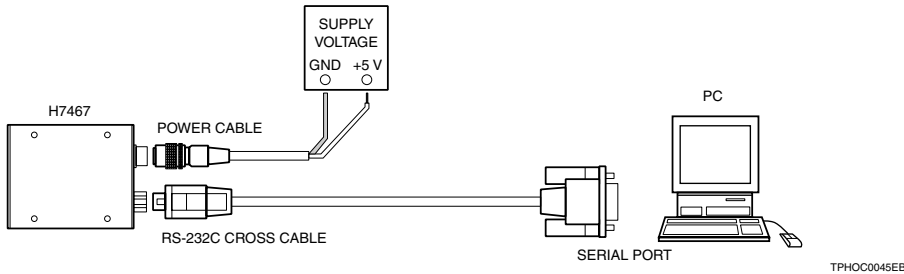


Block Diagram

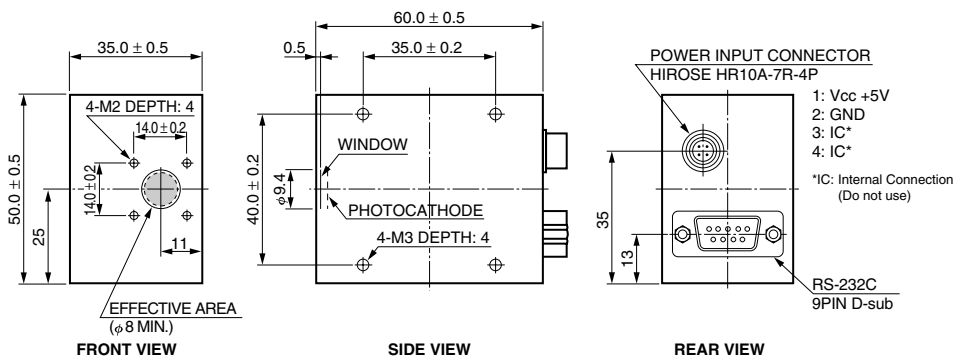


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Connection Diagram

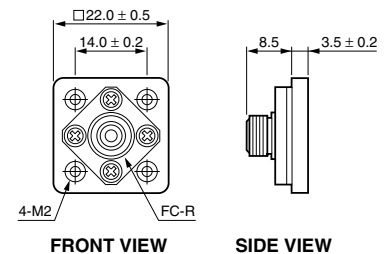


Dimensional Outlines (Unit: mm)



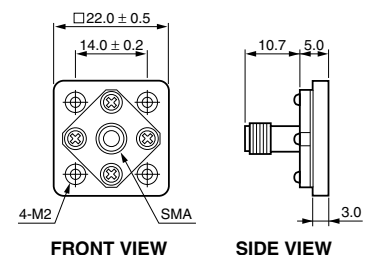
Option (Optical Fiber Adapter) (Unit: mm)

E5776 (FC Type)

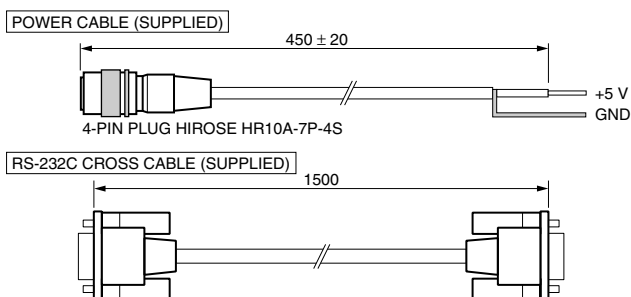


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E5776-51 (SMA Type)



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