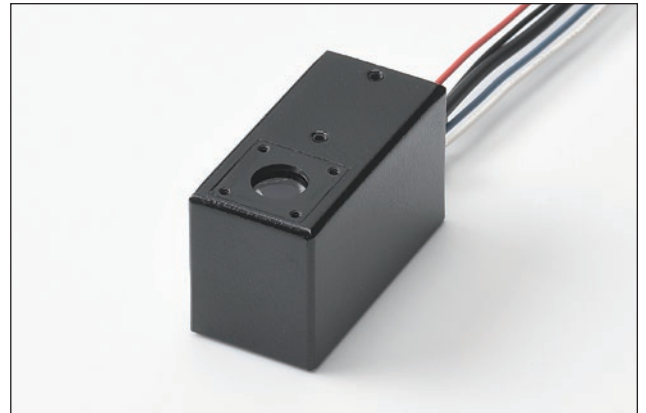


FEATURES

- High quantum efficiency: GaAsP / GaAs photocathode
- Cable output type
- Compact size



SPECIFICATIONS

(at +25 °C)

Parameter				H14119-40	H14119-50	Unit	
Input voltage				+11.5 to +15.5		V	
Max. input voltage				+18		V	
Max. input current ①				12		mA	
Max. output signal current				2		μA	
Max. control voltage				+0.9 (Input impedance 30 kΩ)		V	
Recommended control voltage adjustment range				+0.5 to +0.8		V	
Effective area				φ5		mm	
Photocathode material				GaAsP	GaAs	—	
Spectral response				300 to 740	380 to 900	nm	
Peak quantum efficiency wavelength				520	630	nm	
Cathode	Quantum efficiency	at peak quantum efficiency wavelength	Min.	40	14	% rowspan="6">mA/W	
			Typ.	45	19		
		at 800 nm	Min.	—	11		
		Typ.	—	15			
	Radiant sensitivity	at peak quantum efficiency wavelength	Min.	168	70		
			Typ.	189	95		
at 800 nm		Min.	—	71			
	Typ.	—	97				
Anode	Radiant sensitivity ②	at peak quantum efficiency wavelength	Min.	1.0×10^5	4.2×10^4	A/W	
			Typ.	1.9×10^5	9.5×10^4		
		at 800 nm	Min.	—	4.3×10^4		
		Typ.	—	9.7×10^4			
	Dark current ②③	Typ.	3	4	nA		
		Max.	10	12			
	Gain ②	Min.	6.0×10^5		—		
Typ.		1.0×10^6		—			
Rise time ②				Typ.		1.0	ns
Ripple noise ②④ (peak to peak)				Max.		0.6	mV
Settling time ⑤				Max.		0.2	s
Operating ambient temperature ⑥						+5 to +35	°C
Storage temperature ⑥						-20 to +50	°C
Weight						Approx. 104	g

NOTE: ①At +15 V input voltage and +0.8 V control voltage in darkness

②Control voltage = +0.8 V

③After 30 min storage in darkness

④Load resistance = 1 MΩ, Load capacitance = 22 pF

⑤The time required for the output to reach a stable level following a change in the control voltage from +0.9 V to +0.5 V.

⑥No condensation

PHOTOSENSOR MODULE H14119-40/-50

Figure 1: Typical spectral response

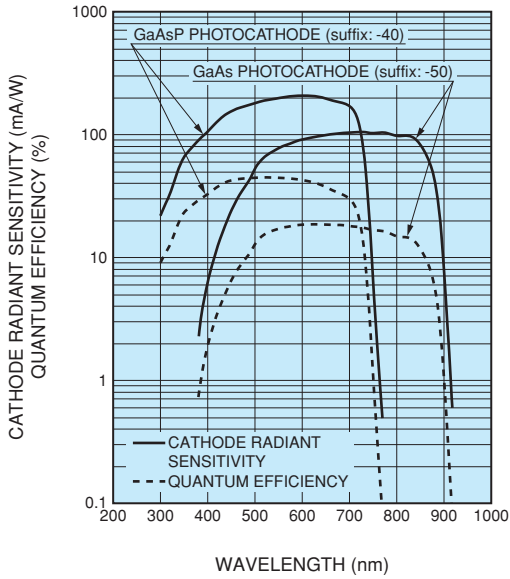


Figure 2: Typical gain

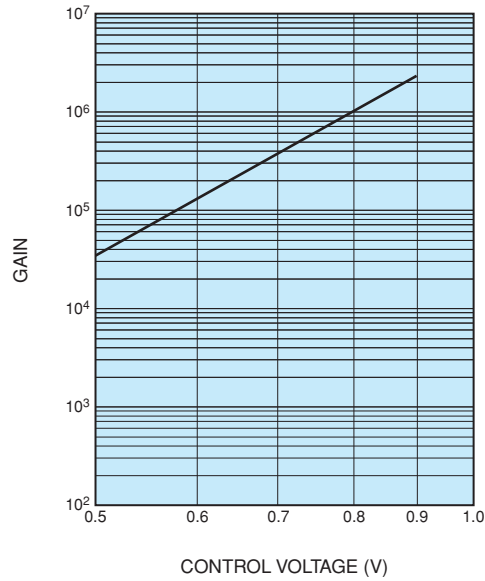


Figure 3: Sensitivity adjustment method

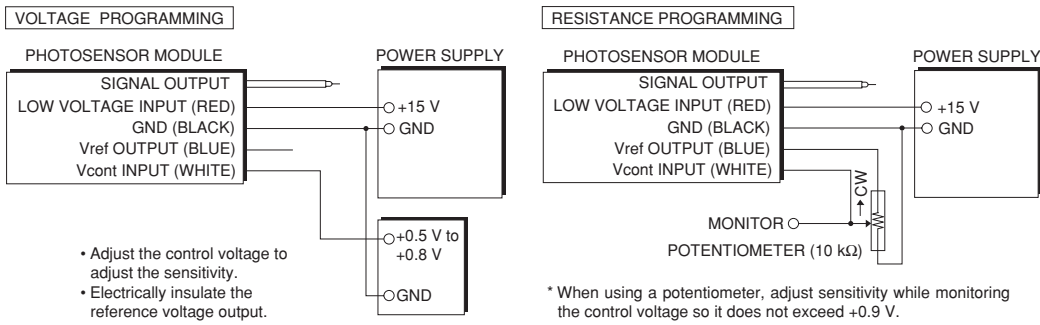
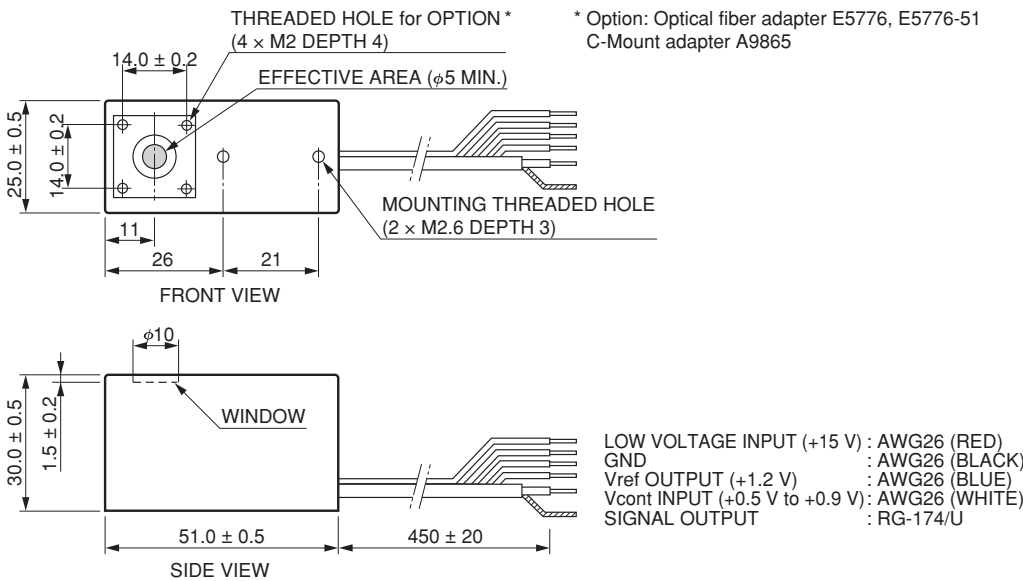


Figure 4: Dimensional outlines (Unit: mm)



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