

## OVER VIEW

The H10425 is a photosensor module that integrates a 25-mm (1") diameter head-on photomultiplier tube with a high-voltage power supply circuit. The H10425 has a large effective photocathode area of 22 mm diameter and features fast time response.

The H10426 is a photosensor module that integrates a 28-mm (1-1/8") diameter head-on photomultiplier tube with a high-voltage power supply circuit. The H10426 has a large effective photocathode area of 25 mm diameter.



Left: H10425 Right: H10426

## SPECIFICATIONS

Parameter			H10425	H10426	Unit	
Spectral Response			300 to 650		nm	
Input Voltage			+11.5 to +15.5		V	
Max. Input Voltage			+18		V	
Max. Input Current *1			3.0		mA	
Max. Output Signal Current			100		μA	
Max. Control Voltage *2			+1.2 (Input impedance 1 MΩ)	+1.5 (Input impedance 1 MΩ)	V	
Recommended Control Voltage Adjustment Range			0.5 to 1.1	0.5 to 1.4	V	
Effective Photocathode Area			φ22	φ25	mm	
Sensitivity Adjustment Range			1: 1000		—	
Peak Sensitivity Wavelength			420		nm	
Cathode	Luminous Sensitivity	Min.	60	60	μA/lm	
		Typ.	90	95		
	Blue Sensitivity Index (CS 5-58)	Typ.	10.5	11	—	
Anode	Radiant Sensitivity *3	Typ.	85	88	mA/W	
	Luminous Sensitivity *4	Min.	40	50	A/lm	
		Typ.	180	200		
	Radiant Sensitivity *3 *4	Typ.	$1.7 \times 10^5$	$1.8 \times 10^5$	A/W	
Dark Current *1 *5	Typ.	3	2	nA		
	Max.	20	10			
Rise Time *4			Typ.	1.5	4	ns
Ripple Noise *4 *6 (peak to peak)			Max.	0.5		mV
Settling Time *7			Max.	10		s
Operating Ambient Temperature *8			+5 to +50		°C	
Storage Temperature *8			-20 to +50		°C	
Weight			170	270	g	

**NOTE:** \*1: Input Voltage=+15.0 V, Control Voltage=+1.0 V, Output Current=Dark Current

\*2: Available I<sup>2</sup>C interface instead of the low voltage input cable. Please consult with our sales office before ordering.

\*3: Measured at the peak sensitivity wavelength

\*4: Control voltage=+1.0 V

\*5: After 30 minutes storage in darkness

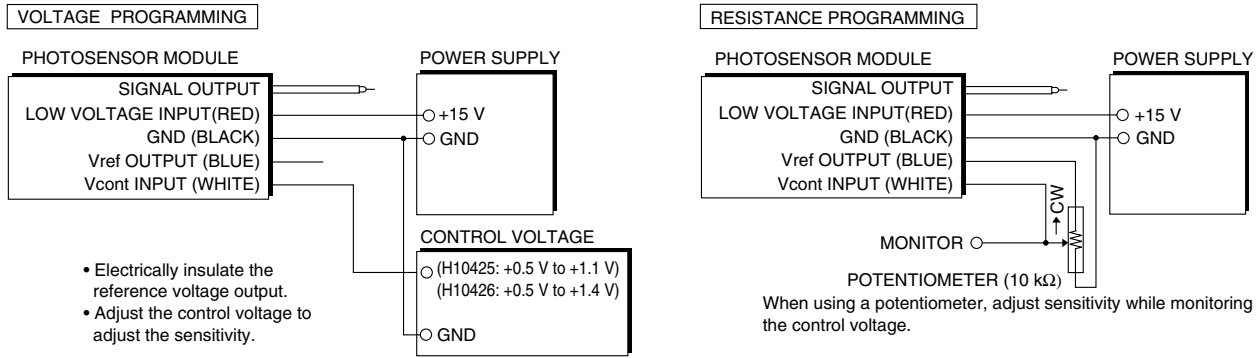
\*6: Cable RG-174/U, Cable length 450 mm, Load resistance= 1 MΩ, Load capacitance=22 pF

\*7: The time required for the output to reach a stable level following a change in the control voltage from +1.0 V to +0.5 V.

\*8: No condensation

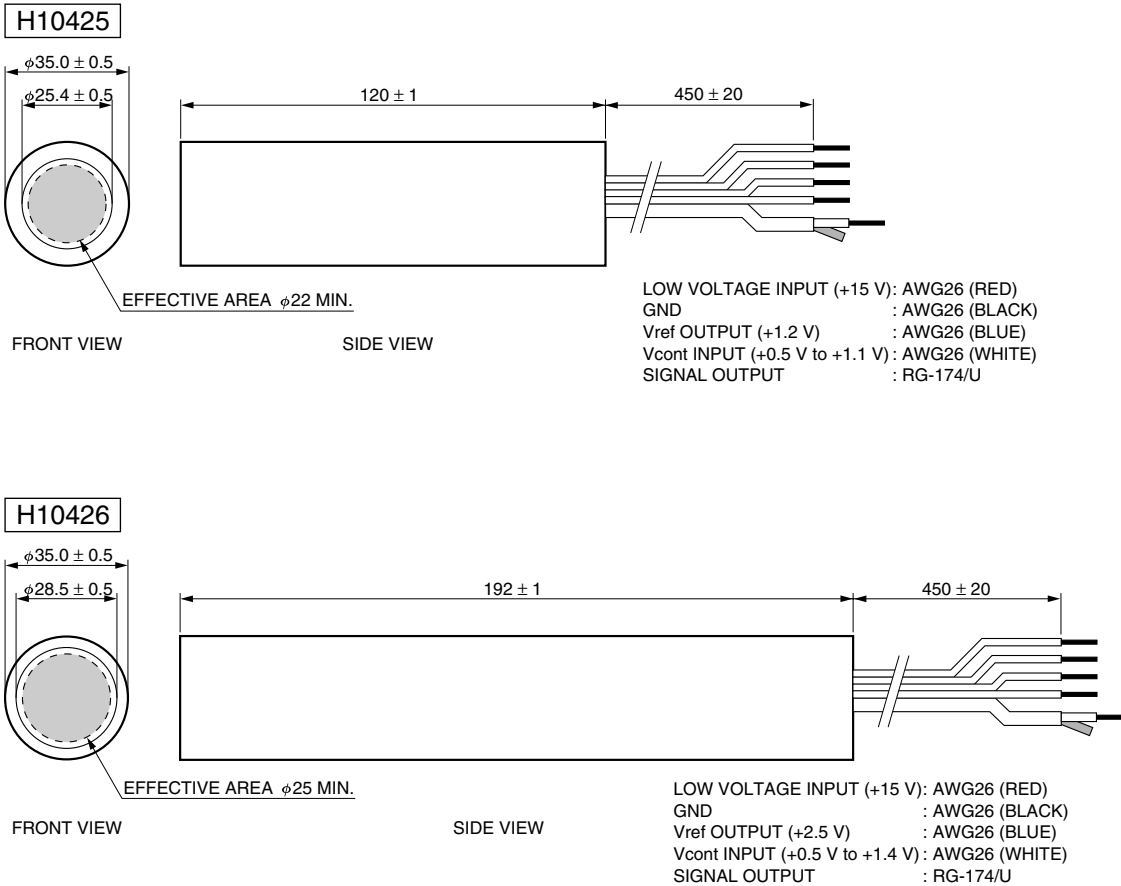
# PHOTOSENSOR MODULES H10425/H10426

Figure 1: Sensitivity Adjustment Method



TPMOC0206EA

Figure 2: Dimensional Outlines (Unit: mm)



TPMOA0046EA

TPMOA0047EA

# HAMAMATSU

WEB SITE [www.hamamatsu.com](http://www.hamamatsu.com)

HAMAMATSU PHOTONICS K.K., Electron Tube Division

314-5, Shimokanzo, Iwata City, Shizuoka Pref., 438-0193, Japan, Telephone: (81)539/62-5248, Fax: (81)539/62-2205

U.S.A.: Hamamatsu Corporation: 360 Foothill Road, P. O. Box 6910, Bridgewater, N.J. 08807-0910, U.S.A., Telephone: (1)908-231-0960, Fax: (1)908-231-1218 E-mail: [usa@hamamatsu.com](mailto:usa@hamamatsu.com)

Germany: Hamamatsu Photonics Deutschland GmbH: Arzbergerstr. 10, D-82211 Herrsching am Ammersee, Germany, Telephone: (49)8152-375-0, Fax: (49)8152-2658 E-mail: [info@hamamatsu.de](mailto:info@hamamatsu.de)

France: Hamamatsu Photonics France S.A.R.L.: 19, Rue du Saule Trapu, Parc du Moulin de Massy, 91882 Massy Cedex, France, Telephone: (33)1 69 53 71 00, Fax: (33)1 69 53 71 10 E-mail: [infos@hamamatsu.fr](mailto:infos@hamamatsu.fr)

United Kingdom: Hamamatsu Photonics UK Limited: 2 Howard Court, 10 Tewin Road Welwyn Garden City Hertfordshire AL7 1BW, United Kingdom, Telephone: 44-(0)1707-294888, Fax: 44(0)1707-325777 E-mail: [info@hamamatsu.co.uk](mailto:info@hamamatsu.co.uk)

North Europe: Hamamatsu Photonics Norden AB: Smidesvägen 12, SE-171-41 SOLNA, Sweden, Telephone: (46)8-509-031-00, Fax: (46)8-509-031-01 E-mail: [info@hamamatsu.se](mailto:info@hamamatsu.se)

Italy: Hamamatsu Photonics Italia: S.R.L.: Strada della Moia, 1/E, 20020 Arese, (Milano), Italy, Telephone: (39)02-935 81 733, Fax: (39)02-935 81 741 E-mail: [info@hamamatsu.it](mailto:info@hamamatsu.it)

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