

LINEAR ARRAY MULTIANODE PMT MODULE SERIES WITH OPTICAL ASSEMBLIES

Hamamatsu provides PMT modules with optical assemblies capable of detecting fluorescence at multiple wavelengths. Each module incorporates a multianode photomultiplier tube integrated with an optical system needed for spectrophotometry.

The product lineup includes three types of output channels: 4, 6, and 8 channels that are selectable according to your application. Custom filters and dichroic mirrors can also be mounted as needed. So feel free to contact us with your own particular request.



FEATURES

- Multicolor detection
- All-in-one package for spectrum analysis
- High efficiency filter optics
- Palm-size and lightweight

APPLICATIONS

- Biomedical fluorescence measurement
- Flow cytometer

SELECTION GUIDE

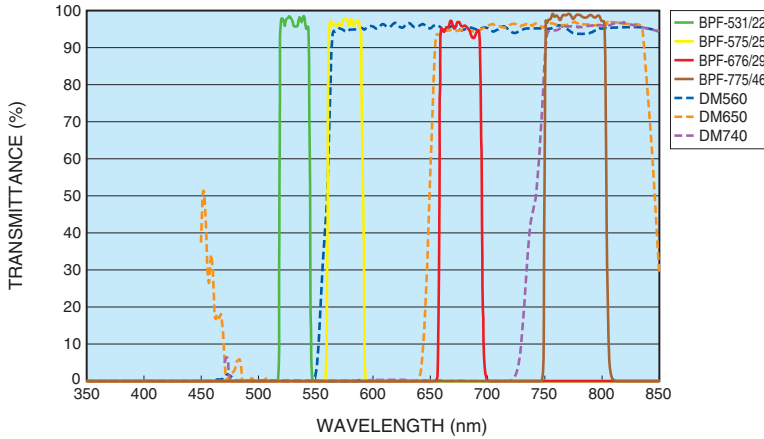
		4 ch			6 ch		8 ch	
Features		<ul style="list-style-type: none"> · 4-colors measurement with one PMT module · Low crosstalk 			<ul style="list-style-type: none"> · 6-colors measurement with one PMT module · High efficiency filter optics (core diameter: 400 μm Max.) · Longer wavelength in first 		<ul style="list-style-type: none"> · 8-colors measurement with one PMT module · Longer wavelength in first 	
Concept image of filter block								
		(A) Dichroic mirror, (B) Glass prism for optical correction, (C) Band-pass filter (D) High-reflectivity mirror, (E) Glass block, (F) Photomultiplier tube						
Type No.		H11454	H11456	H11458	H13457	H12730	H12731	H12732
Built-in features	PMT	✓	✓	✓	✓	✓	✓	✓
	Divider circuit	✓	✓	✓	✓	✓	✓	✓
	Pre amplifier		✓	✓	✓		✓	✓
	High voltage power supply		✓	✓	✓		✓	✓
	Individual gain control			✓	✓	✓		✓

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CHARACTERISTICS

Standard bandpass filters and dichroic mirrors

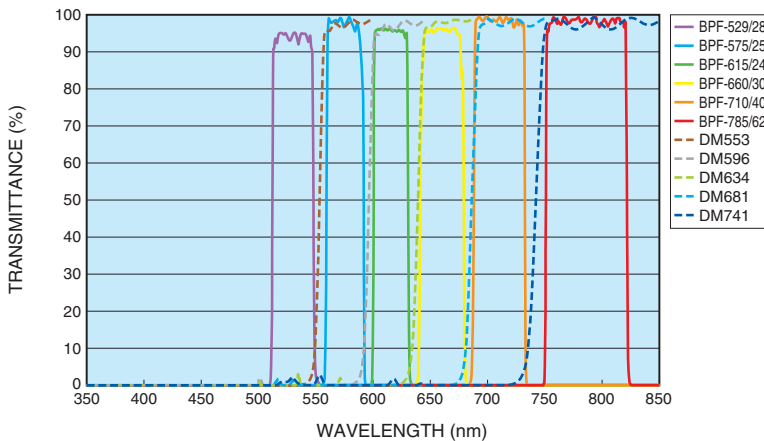
4 ch



Parameter	Channel				Unit
	1	2	3	4	
Filter peak wavelength	531	575	676	775	nm
Width (FWHM)	22	25	29	46	nm
Optical distance *	29.9	35.9	41.8	47.8	mm

* Entrance hole to detector photochathode

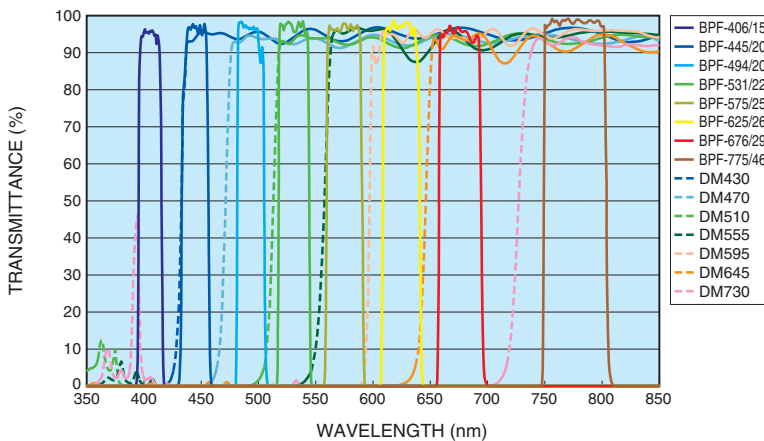
6 ch



Parameter	Channel						Unit
	1	2	3	4	5	6	
Filter peak wavelength	785	710	660	615	575	529	nm
Width (FWHM)	62	40	30	24	25	28	nm
Optical distance *	37.0	65.2	93.4	121.6	149.8	178.0	mm

* Entrance hole to detector photochathode

8 ch



Parameter	Channel								Unit
	1	2	3	4	5	6	7	8	
Filter peak wavelength	775	676	625	575	531	494	445	406	nm
Width (FWHM)	46	29	26	25	22	20	20	15	nm
Optical distance *	23.6	36.8	50.1	63.3	76.6	89.8	103.1	116.3	mm

* Entrance hole to detector photochathode

Choice of bandpass filters for optical assembly

Besides the standard bandpass filters installed in the optical system, we have a variety of bandpass filters available in stock. Select the desired bandpass filters needed to configure a PMT module with the optical assembly most ideal for your application. Moreover, if you provide us with your WBPF (wide band-pass filter), we will use it to configure an optical system that matches your request. Please consult us for details.

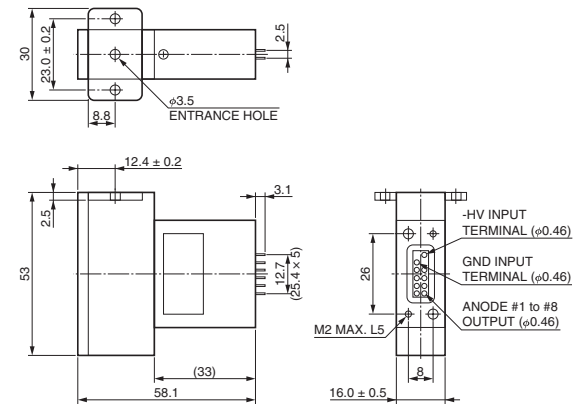
Dimensional outline (Unit: mm)

4 ch

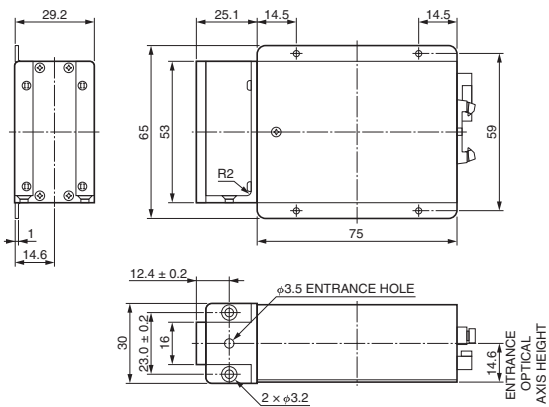


H11454/H11456/H11458

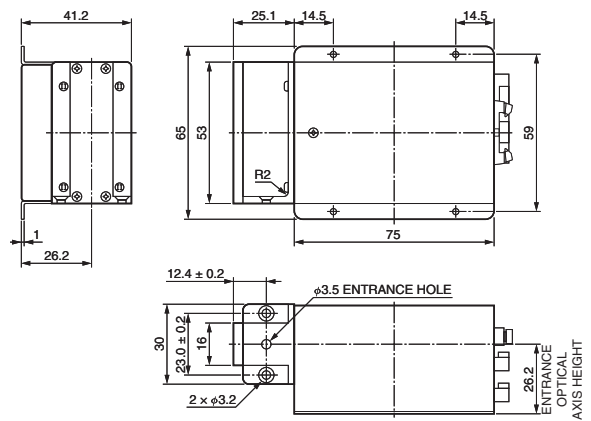
H11454



H11456



H11458

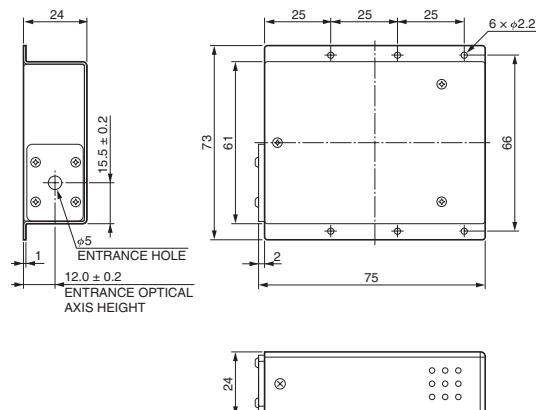


6 ch



H13457

H13457



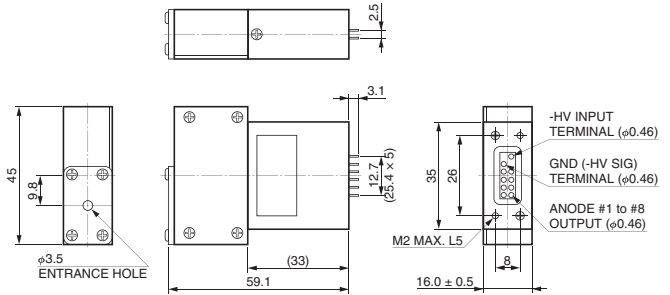
LINEAR ARRAY MULTIANODE PMT MODULE SERIES WITH OPTICAL ASSEMBLIES

Dimensional outline (Unit: mm)

8 ch

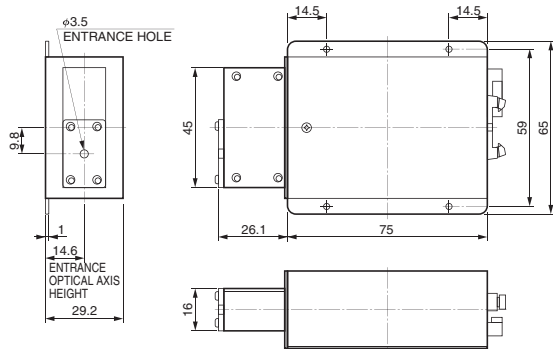


H12730

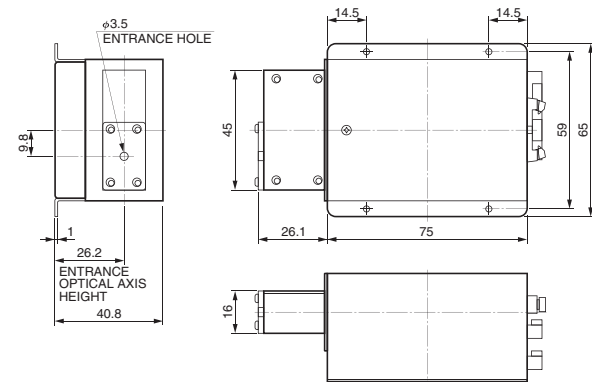


H12730/H12731/H12732

H12731

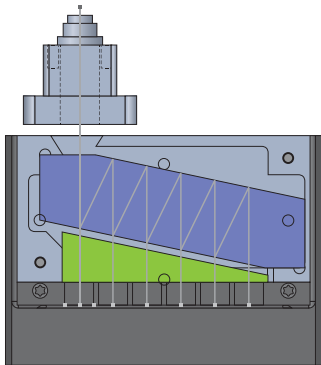


H12732



OPTIONS

	Fiber collimator block		C-mount type (without collimation lens)
	SMA type	FC type	
H11454 / H11456 / H11458	A15247-11	A15247-12	A15247-13
H13457	A15247-21	A15247-22	A15247-23
H12730 / H12731 / H12732	A15247-31	A15247-32	A15247-33



Fiber collimator block A15247-11 (SMA type) / -12 (FC type) / -13 (C-mount type)

Hamamatsu provides an adapter with a fiber collimation lens to help efficiently couple light from an optical fiber. This adapter is compatible with SMA, FC, and C-mount connectors.
(The C-mount type does not have a fiber collimation lens.)

HAMAMATSU PHOTONICS K.K. www.hamamatsu.com

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