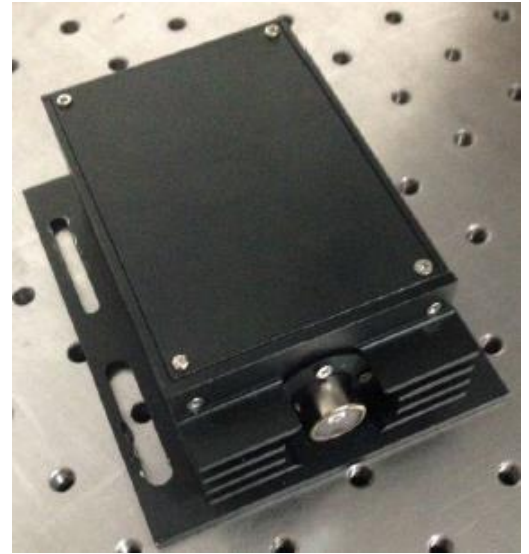
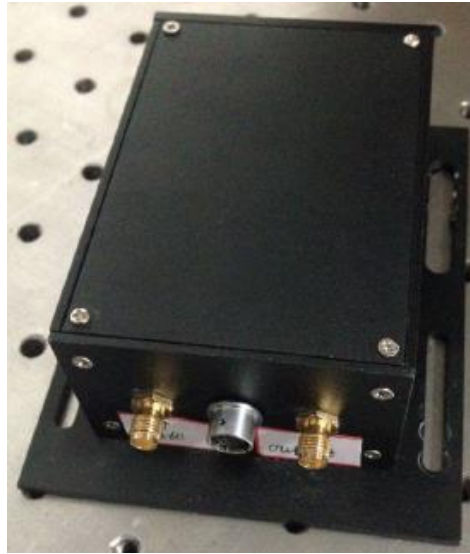


Single Photon Counting Module

SPCM-IGA



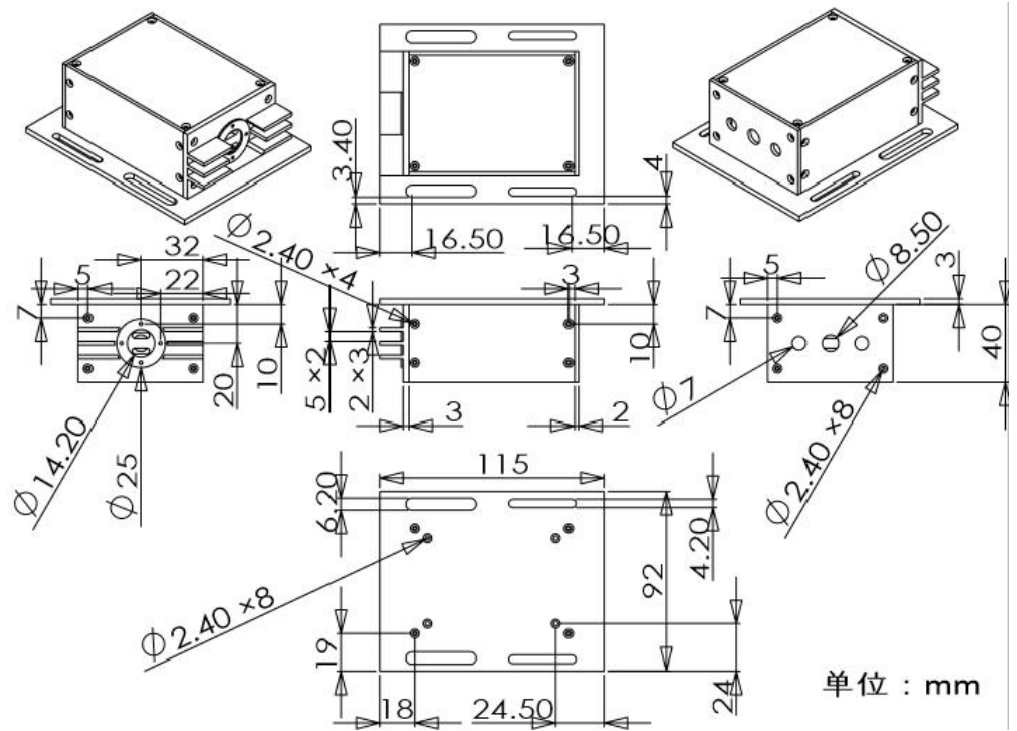
Description

SinglePhotonCountingModule-InGaAs (= SPCM-IGA) has been developed to offer high quantum efficiency with a wide dynamic range and they easyness for use of photon counting. Our SPCM-VIS contains everything required for single photon detection in the spectral range between 1000nm and 1700nm. Incident photons generate corresponding electrical pulses which can conveniently be read out at the TTL output. The gating function allows the module to be disabled between measurements to provide protection against accidental overload.

- * Extremely low dark count rates
- * Laser range finder
- * Fluorescence analysis



Package Drawing



Electro-Optical Characteristics (@+25°C)

Parameter	Min	Typ	Max	Unit
Active Area, dia (selected for purpose by dark Count rate)		40		µm
Spectral Range	250		1100	nm
Dark Count Rate	I		1E-4	Counts/ns
	II		1E-5	Counts/ns
	III		5E-6	Counts/ns
Photon detect Efficiency	1064nm	10	20	%
	1550nm	10	20	%
Time Resolution	Normal mode	350		ps
	GHz mode	150		ps
Dead Time	Normal mode	1		µs
	GHz Mode	5		µs
Gate	on	TTL low		V
	off	TTL high		V
TTL output pulse length		40		ns
TTL output pulse amplitude @50 Ohm		2,0		V
Supply Voltage	4,5	5,0	5,5	V
Supply Current		0,6		A
Outline Dimensions		104 * 84 * 45		mm

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Opto-Electronic
Components



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Scientist Comments:

"Interesting approach w.r.t. selection of size of active area for dark count rates".

"Particularly suited for single mode fiber applications".

"The dark count rate (III) with 5000 counts/s (= 1E-6/ns) is quite acceptable".

"The SPCM-IGA is very good value for the money".