

High-sensitivity, high-band photodetector 30KHz to 1GHz

The integrated APD photoreceiver is a high-sensitivity, high-bandwidth photodetector that uses a high-sensitivity APD (avalanche photodiode) and has a high-bandwidth amplifier and an exclusive high-voltage power supply are built in. It can be used easily as the entire system is integrated.

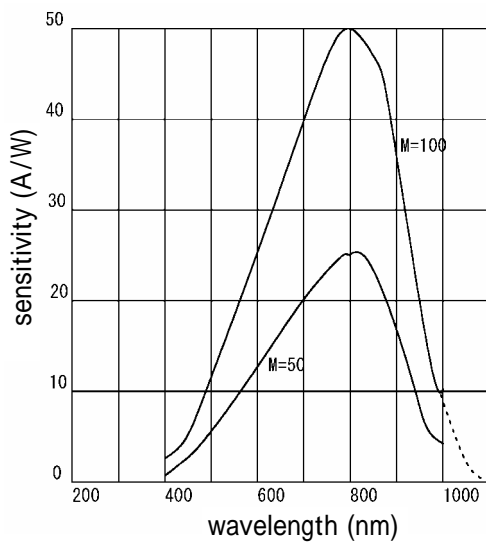


Dimensions 82(W) X 61(H) X 140(D)

Features

- APD (avalanche photodiode), power supply, and wide band amplifier are integrated
- Bandwidth 30KHz to 1GHz
- Optical alignments are easy as the colimated lens are included.
- Support Various Application with the high performance APD.
- include AC adapter

Spectral Sensitivity



Sensitivity

Actual output powers after the built-in amplifier

- 500nm 8.5mV/ μ W
- 650nm 25.5mV/ μ W
- 800nm 38.7mV/ μ W

Condition: APD multiplication factor (M) is adjusted to 100 (M=100)

Note: APD is made by Hamamatsu Photonics Co., Ltd.

Model Number and Specifications

Input type	Model Number	APD active area	wavelength range	frequency range
Colimated Lens	APD-100-S2382	0.5mm	400 to 1000nm	30KHz to 1GHz
Colimated Lens	APD-100-S2383	1.0mm	400 to 1000nm	30KHz to 600MHz

Specifications APD-100-S2383

item	description
APD detector	S2383 (Hamamatsu Photonics)
Active area	1.0mm
Sensitivity	0.5(A/W) at 800nm M=1
Multiplication factor	M=100
Cutoff frequency	600MHz

Specifications APD-100-S2382

item	description
APD detector	S2382 (Hamamatsu Photonics)
Active area	0.5mm
Sensitivity	0.5(A/W) at 800nm M=1
Multiplication factor	M=100
Cutoff frequency	900MHz

General Specification

item	description
Power	AC Adaptor with DC9V, 0.5A AC100V 50Hz/60Hz
Power Consumption	<20VA
Pre-Amplifier	Band Width 30KHz to 1000MHz Gain 30dB(Voltage Gain 30 times (typ.)) Gain Flatness < ± 2dB Output Impedance 50 Output max +10dBm
High Voltage Power Supply	Output Voltage +40 to +200V DC APD Current Limit 180uA (Typ.) Ripple <10mVpp
Output Connector	BNC
Dimension	82(W) X 61(H) X 140(D)
Operating Temperature	+15 to +30
Storage Temperature	-10 to +50
Operating/Storage Humidity	<70% (noncondensing)
Accessory	Camera Lens CATV Lens (f:1.6mm F:1.4)
AC Adaptor	DC9V, 0.55A
Output Cable	one BNC-BNC (RG174/U Black) 2m

In keeping with our commitment to continuing improvement, we reserve the right to change specifications without notice and without liability for such changes.

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