Si APD Photodetector Module



Description

The Si avalanche photodetector module integrates a low-noise APD, a low-noise broadband transimpedance amplifier, an ultra-low-noise isolated power supply, a high-voltage supply, and APD temperature compensation. The isolated power supply ensures that the output signal is not affected by external power sources, while the APD temperature compensation enhances the stability of the detector module. The avalanche photodetector features high gain, high sensitivity, wide bandwidth, and low noise.

Features

- Low noise
- High gain
- Built-in high-voltage power supply
- APD temperature compensation
- Compact structure
- Built-in low-noise isolated power supply

Specifications

Product PN#	APD-100M-C	APD-200M-C	APD-300M-C	APD-400M-C	APD-500M-C	APD-1G-C	APD-2G-C	Unit
Detector Type	Si							

62 Highland Ave., Bethlehem, PA 18017, USA
Sales: contact@cybel-llc.com | Web: www.cybel-llc.com | Tel: +1 (610) 691-7012

Wavelength	400~1100							nm
Bandwidth	100M	200M	300M	400M	500M	1G	2G	Hz
Detector Responsivity	0.55	0.55	0.55	0.55	0.55	0.55	0.55	A/W@850nm
Transimpedance Gain	300K	300K	300K	300K	300K	300K	300K	V/W
Output Impedance	50	50	50	50	50	50	50	Ω
Saturation power	13	13	13	13	13	13	30	uW
NEP	0.18	0.18	0.18	0.18	0.18	0.2	0.2	pW/√(Hz)
Output Coupling Mode	DC/AC	DC/AC	DC/AC	DC/AC	DC	AC	AC	
Supply Voltage	5	5	5	5	5	12	12	V
Supply Current	0.5(max)	0.5(max)	0.5(max)	0.5(max)	0.5(max)	0.5(max)	0.5(max)	A
Optical input	FC/APC(Free Space optional)							
Radio Frequency Output	SMA							
Dimensions	65*50*25							mm

Application

- Fiber optic sensing
- Optical fiber communication
- Laser ranging
- Spectroscopy
- Nanosecond-level optical pulse detection