

SPIDER High Dynamic Range VIS-SWIR Photodetector



Stock **#26-740** 3 In Stock

-

1

+

S\$5,747⁰⁰

ADD TO CART

Volume Pricing	
Qty 1+	S\$5,747.00 each
Need More?	Request Quote

Note: This item requires accessories for use | [Learn More](#)

Product Downloads

General

	Type:
Voltage Output	
USB Output	

Physical & Mechanical Properties

218	Weight (g):
101.5 x 81 x 28.5	Dimensions (mm):

Active Area (mm):		Si - 2.4 x2.4 InGaAs - Ø1
Optical Properties		
Spectral Response (nm):		320 - 1700
Peak Response Wavelength (nm):		Si - 920 InGaAs - 1550
Electrical		
Voltage Noise, Low Gain (V/Hz ^{1/2}):		20 x 10 ⁻⁹
Voltage Noise, High Gain (V/Hz ^{1/2}):		680 x 10 ⁻⁹
Transimpedance Gain (Ω):		8 Selectable Levels - 1.5kΩ, 4.6kΩ, 14.4kΩ, 44.8kΩ, 142kΩ, 446kΩ, 1.4MΩ, 4.4MΩ
Dark Current I _d (nA):		Si - 0.13 InGaAs - 1
Frequency (kHz):		Min - 29kHz Max - 56kHz
Sampling Rate (kSPS):		8 Predefined Rates: 120, 100, 80, 64, 32, 16, 10, 5, 2.5, 1, 0.5
Transimpedance Gain (dBΩ):		8 Selectable Levels - 64, 73, 83, 93, 103, 113, 123, 133
Hardware & Interface Connectivity		
Connector:		USB
Output Voltage (V):		0-10 on BNC
Power Supply:		Included 12V Power Supply or Power Over USB
GPIOs:		3
Environmental & Durability Factors		
Operating Temperature (°C):		+10 to +40
Storage Temperature (°C):		-20 to +70
Regulatory Compliance		
Certificate of Conformance:		View

Product Details

- Two Color Si-InGaAs Chip for 320 – 1700nm Wavelength Range
- Embedded 24-Bit Analog-to-Digital Converter
- Digital USB Connection and Two Analog BNC Connections

NIREOS SPIDER High-Dynamic Range VIS-SWIR Photodetector is a broadband, amplified Si-InGaAs photodetector that allows for analog or digital connection and enables rapid development of high-performance sensing and spectroscopy solutions suitable in industrial, laboratory, and research environments. Featuring a two-color Si and InGaAs chip, this photodetector allows straightforward beam alignment and achieves a wide spectral response ranging from 320 - 1700nm. With an embedded 24-bit analog-to-digital converter (ADC), the Si and InGaAs analog outputs are simultaneously digitized with adjustable sampling rates from 0.5 to 120kSPS via USB connection. NIREOS SPIDER High-Dynamic Range VIS-SWIR Photodetector's Si and InGaAs channels are both independently amplified with analog bandwidths up to 56kHz, picowatt sensitivity, and 8 switchable transimpedance gain options ranging from 1.5kΩ to 4.4MΩ. This photodetector comes with a user friendly, plug-and-play software for ease of setup, and features DLLs allowing for programming using .NET based languages such as C++, C#, LabView, Python, and MATLAB.

Technical Information



