

## Discrete Amplification Photon Detector Device Evaluation Module



Amplification Technologies DEM1DAPD10 series module consists of high frequency input and output terminals for evaluation of multichannel Discrete Amplification Photo Detector (DAPD) for analog detection of low level light signal from one photon to several thousand photons. The Photon Detector Evaluation Modules (DEM) consists of a low noise package with built-in bias filtering circuit and RF analog output. The Device Evaluation Module is designed for comprehensive evaluation of DAPD in TO-5(39) package in full range of its operating modes. It allows easy use of various photodetector packages as well as user defined operating voltage for optimal signal detection of specific applications. DEM is useful for detection of light pulses from single photon to several thousand as it allows easily observe single electron response pulse. The module could be coupled directly to an external amplifier of the user's choice. We recommend Mini-Circuits ZX60-4016E S+, 20dB, 20-4000MHz).

### Contact Information:

**AMPLIFICATION TECHNOLOGIES INC**  
**1400 Coney Island Avenue**  
**Brooklyn, New York 11230**

P (718) 951-8021

F (718) 951-8030

[sales@amplificationtechnologies.com](mailto:sales@amplificationtechnologies.com)

[www.amplificationtechnologies.com](http://www.amplificationtechnologies.com)

# DEM1DAPD10 Series

## Specifications (at an ambient temperature of 25°C)

Parameter	DEM1DAPD10 series				Unit
	-018	-030	-050	-100	
Active area diameter	0.18	0.30	0.50	1.00	mm
Single Electron Response output voltage	2 - 4	2.5 - 3	1 - 2	0.5 - 1.5	mV
Max Output voltage	0.2 - 0.5	0.4 - 1	0.6 - 1.8	1.2 - 5	V
Output impedance after external amplifier	50				$\Omega$
Connectors	SMA connectors for power supply & signal output, TE cooler and thermistor				
Dimensions	Diameter 49, height 20				mm

