



千兆赫兹光子检测模块

产品说明

新 CPM 千兆赫兹光子检测模块(GPDPM)提供了超能力低光亮度检测在直流模式下操作，采用直流模式操作，单光子灵敏度 GPDPM 模块优于传统计数电路，它们的性能不仅限于高光层次。设备齐全的模块包括通道光电倍增管，所述高压电源，模拟电流放大器，A 至 D 转换和与微控制器和允许最佳的适应范围广泛的应用的 USB / SPI 接口。

特征和优点

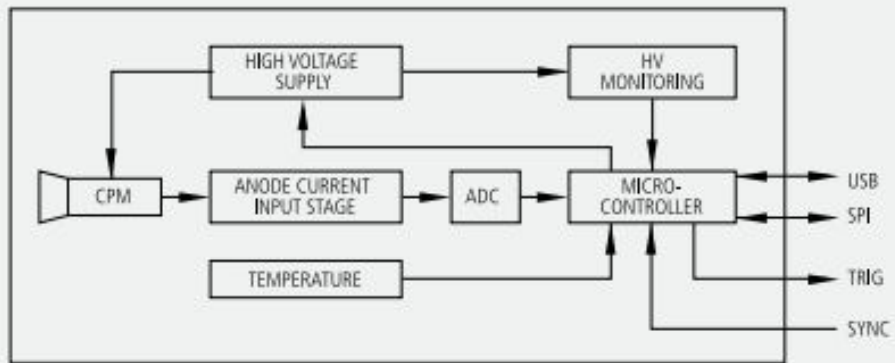
- 极低的背景噪声
- 极高的动态范围
- 高增益
- 4 个不同的操作模式
- 可变接口选项
- 最适合于多模式分析应用

应用

- 多通道分析测量
- 光谱成像
- 时间分辨荧光
- 高通量筛选
- 基因与细胞分析
- 微型板框阅读

千兆赫兹光子检测模块					
Parameter	Condition	Min	Typ	Max	Units
Supply Voltage	-	5.0	5.3 ⁵	5.6	VDC
Supply current	-	-	300	-	mA
Detection range ¹	Real counting mode	1	-	1e4	Counts Per second ⁴
	Straight output mode	1	-	5e7	Counts Per second ⁴
	Fast switching mode	1	-	1e9	Counts Per second ⁴
	HV reduction mode	3e5	-	1e10	Counts Per second ⁴
Switching dead time	w/o offset calibration	-	1	-	ms
In fast switching mode	Including offset calibration	-	20	-	ms
QE ²	λ peak	-	20%	-	Photoelectrons/ photons
CPM gain ³	-	1E3	adjustable	-	-
Sample time	Continuous data output	200	-	5000	ms
	(under development)	1	-	5000	ms
Acquisition time	Width of measurement				
	Window for flash sequence measurements	3	-	200	μ s
Interface	USB2.0	-	2	-	Mbit/second
	SPI(under development)	-	-	-	

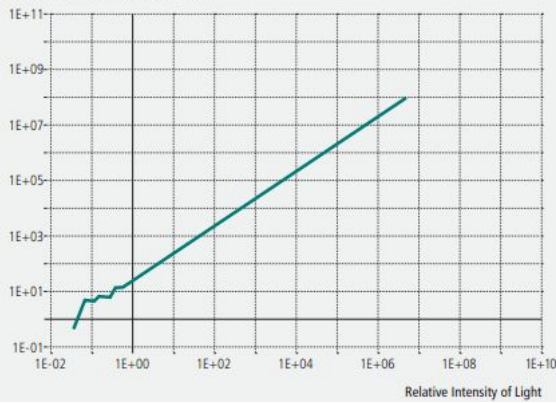
Block Diagram Gigahertz Photon Detection Module



Straight Output Mode

Measurement Bandwidth Straight Output Mode at 1 S/s

Data Readout, Pulses per second (Cps)



Fast Switching Mode

Measurement Bandwidth Extended Range/
Fast Switching Mode at 1 S/s

Data Readout, Pulses per second (Cps)

