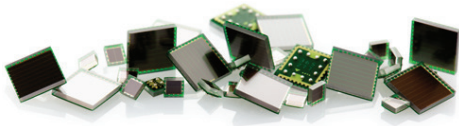


KETEK introduces the world's smallest 1 x 1 mm² SiPM in a robust wafer level package. The new SiPM series allows even more compact SiPM arrays which we offer tailored to your application specific needs.

Our new high dynamic range SiPM module with integrated TIA and bias source is a plug and play replacement for PMTs and APDs. Use it in your application and benefit from low cost, high detection efficiency and easy calibration.

WB SERIES SiPM



WB Series SiPM

The new, highly-flexible chip and package design is optimized for applications demanding a high fill factor.

Our new technology allows economic production of compact and scalable detector arrays. KETEK provides arrays upon customer specifications.

For an easy evaluation and integration into your current setup, we offer the WB Series optionally premounted with pins.

- Active sensor area 1.0 x 1.0 mm² and 3.0 x 3.0 mm² with 15 μm or 25 μm microcell sizes
- High photon detection efficiency (PDE) up to 43 % @ 430 nm
- Afterpulsing probability less than 1 %
- Negligible delayed crosstalk
- Robust wafer level package technology
- Super fast cell recovery time
- Excellent dynamic range and linearity
- Insensitive to magnetic fields

TIA Module SiPM



Silicon Photomultiplier Module with Integrated TIA and BIAS Source

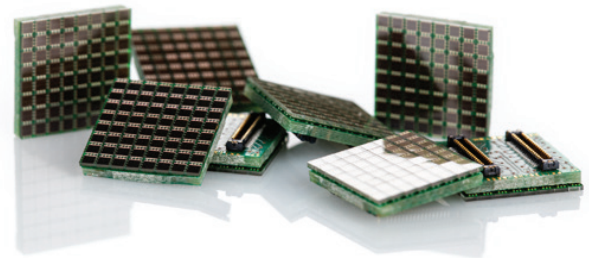
Replacing your expensive PMT detector has never been easier.

KETEK's high dynamic range SiPMs with a transimpedance amplifier and bias source integrated into a compact and multi-mount housing offers you a plug & play solution for biophotonics and analytical instrumentation - and by the way it's saving costs.

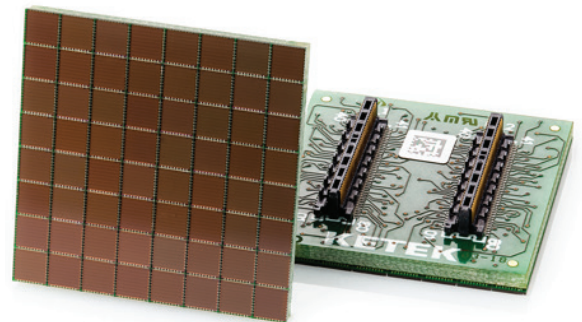
- Plug & Play solution for flow cytometry and RT-PCR
- Replacement for PMTs, APDs and PIN diodes
- High PDE and dynamic range
- Single photon counting capability
- Easy mounting and mechanical adaption
- Integrated Transimpedance Amplifier (TIA) and controllable bias source
- Tunable Output Offset

World's Smallest SiPM in Wafer Level Package

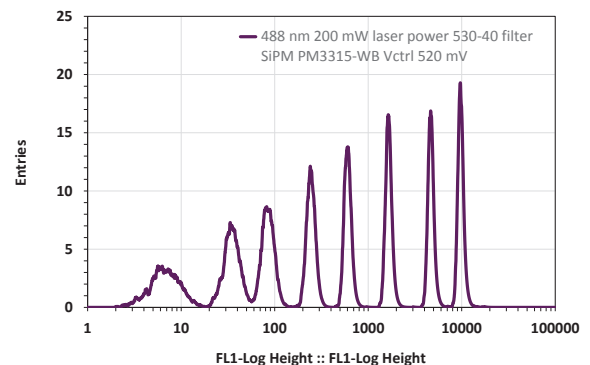
8 x 8 SiPM Array based on PM1125-WB Series



8 x 8 SiPM Array based on PM3325-WB Series



Cytometry: 8 Peaks Rainbow Calibrating Particle on MoFo®

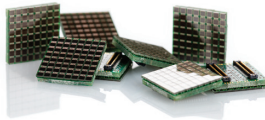


KETEK SiPM WB Series



Type	Active area [mm ²]	Microcell size [μm]	PDE (430 nm, 5.0 VOV) [%]	Package Dimensions [mm ³]	Connection	Order Code
PM11	1.0 x 1.0	25	43	1.315 x 1.315 x 0.595	BGA	PM1125-WB
PM33	3.0 x 3.0	15	31	3.315 x 3.315 x 0.595	BGA	PM3315-WB
		25	45			PM3325-WB

KETEK SiPM Array



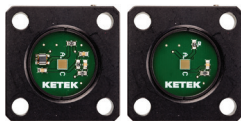
Type	Active area [mm ²]	Number of channels	Pixel Pitch	Outer Dimensions [mm ³]	Connection	Order Code
PA1125	1.0 x 1.0	8 x 8	1.36	10.84 x 10.84 x 2.5	MOLEX 502430-3412	PA1125-WB-0808
PA3325	3.0 x 3.0	8 x 8	3.36	20.84 x 26.8 x 3.08	SAMTEC ST4-40-1.00-L-D-P	PA3325-WB-0808

KETEK SiPM Eval-Kit



Type	Version	Order Code
Evaluation Kit	Optical Bench Mount compatible with Thorlabs® Cage System including preamplifier	PEVAL-KIT-MCX

KETEK SiPM Evaluation PCBs



Type	Version	Connector	Signal Output	Supply Voltage	Order Code
Evaluation PCB	Optical Bench	MCX	AC coupled Signal and Monitor Output	Positive Bias	PE3315-WB-AX PE3325-WB-AX
Evaluation PCB	Optical Bench	MCX	DC coupled resistive tap	Positive Bias	PE3315-WB-AR PE3325-WB-AR

KETEK SiPM Accessories



Type	Output	Connector	Supply Voltage	Output Voltage	Order Code
Bias Source	20-40 V 2 or 20 mA	SMA	12 V DC, 0.85 A	Positive or Negative	PEBIAS
Preamplifier	13x Gain	SMA	12 V DC, 0.06 A	Positive or Negative	PEPREAMP