Complete detector portfolio

ADVACAM
Imaging the Unseen

MiniPIX

MiniPIX EDU



MiniPIX BASIC



MiniPIX MAGIC



MiniPIX SPRINTER



MiniPIX SPACE



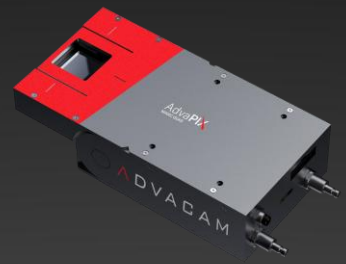
ADVASPACE
member of AdVisiones Technologies

AdvaPIX

AdvaPIX MAGIC



AdvaPIX MAGIC Quad



AdvaPIX SPRINTER



WidePIX

WidePIX CHROMATIC



WidePIX CHROMATIC Industry



WidePIX CHROMATIC SenseEdge



WidePIX DYNAMIC Industry



Radiation camera

ADVACAM
Imaging the Unseen

MiniPIX
MAGIC



advacam.com/camera/minipix-magic/

Main Information

ADVACAM
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> A miniaturized and low-power radiation camera equipped with particle tracking and imaging Timepix3 sensor (256 x 256 square pixels with a pitch of 55 µm). It offers versatility and portability for particle tracking and research.

Readout chip type:	Timepix3
Pixel size:	55 x 55 µm
Dynamic range in one frame:	1022
Dark current:	none
Maximum frame rate:	16
Time resolution:	1,6 ns
Available sensors:	Si, CdTe
Pixel operation mode:	Time-over-Threshold, Time-of -Arrival



> This detector is aquipped with Timepix3 chip, which is position, energy, and time-sensitive. This means it digitally records the position, energy, time of arrival, and track shape of every particle that comes into contact with the sensor. Other information can be calculated form this data, such as particle type, direction of flight, its energy, or charge. The device collects data in pixel mode, which means each hit is read out immediately at a maximal rate of 2.3 million hit pixels per second. This makes the MiniPIX MAGIC detector ideal solution for all particle tracking aplications.

Fast radiation particle-tracking detector

ADVACAM
Imaging the Unseen

AdvaPIX
MAGIC



https://advacam.com/camera/advapix-magic/

Main Information

ADVACAM
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> A precise and fast radiation particle-tracking detector with Timepix3 chip. It records each radiation hit, enabling superior resolution, speed, and ionizing radiation detection possibilities.

Readout chip:	Timepix3
Sensitive area:	14 x 14 mm
Time resolution:	1.6 ns
Readout speed:	38 Million hits/s
Number of pixels:	256 x 256
Pixel pitch:	55 µm
Energy Resolution:	1,2- 9,9 keV
Min Detectable Energy:	3 keV for X-rays



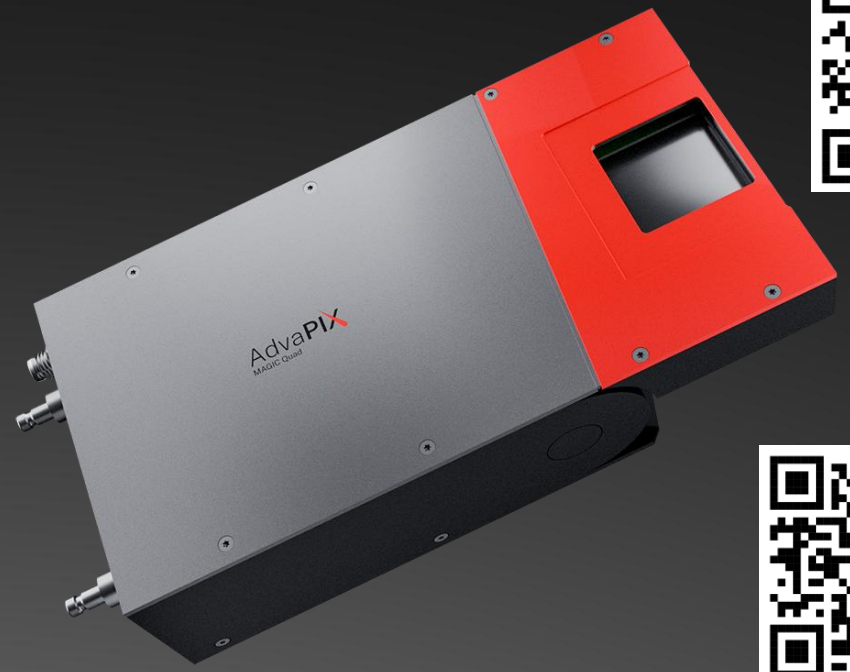
> This device is the world's first photon-counting detector that operates in data-driven mode. This means it records every radiation hit as a continuous data stream. The device measures each detected quanta's position, energy, and time-of-arrival. The detector has an array of 256×256 spectrometers (pixels) with Si or CdTe sensors. Each pixel records a spectrum of incoming events. The measured time stamp also allows checking for coinciding events or charge sharing between pixels.

Fast radiation particle-tracking detector

ADVACAM
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https://advacam.com/camera/advapix-magic-dual/

AdvaPIX
MAGIC Quad
MAGIC Dual



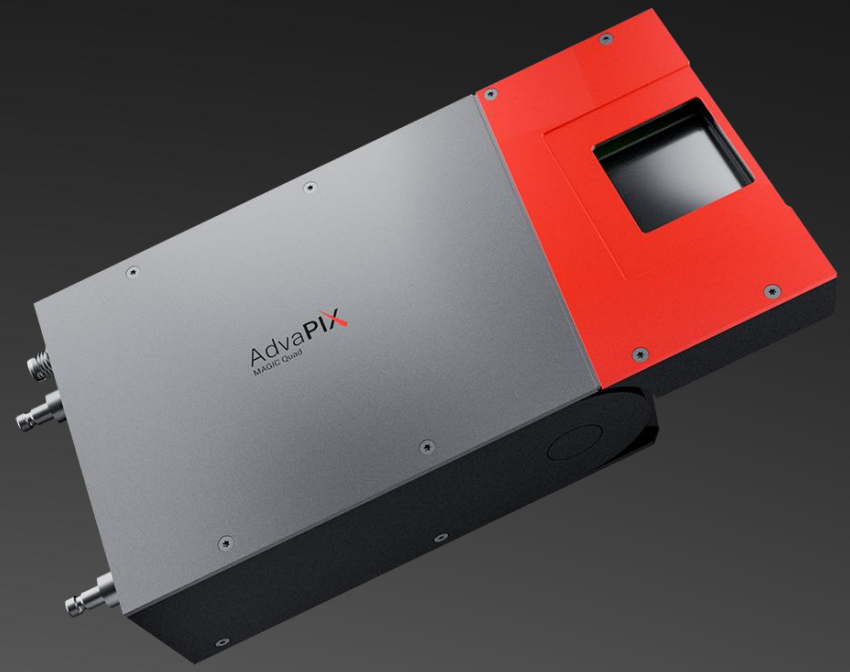
advacam.com/camera/advapix-magic-quad/

Main Information– AdvaPIX MAGIC Dual

ADVACAM
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> A precise and fast particle-tracking detector with four Timepix3 chips offering superior resolution, speed, and ionizing radiation detection possibilities. The shape of the case and inside electronics allows to use high energy X-ray beam without damaging the device.

Readout chip type:	Timepix3
Pixel pitch:	55 µm
Sensitive area:	131,072 px
Power:	External 12 V
Time resolution	1,6 ns
Maximum readout speed	42 milin pixels / s
Readout chip type:	Timepix3
Pixel pitch:	55 µm



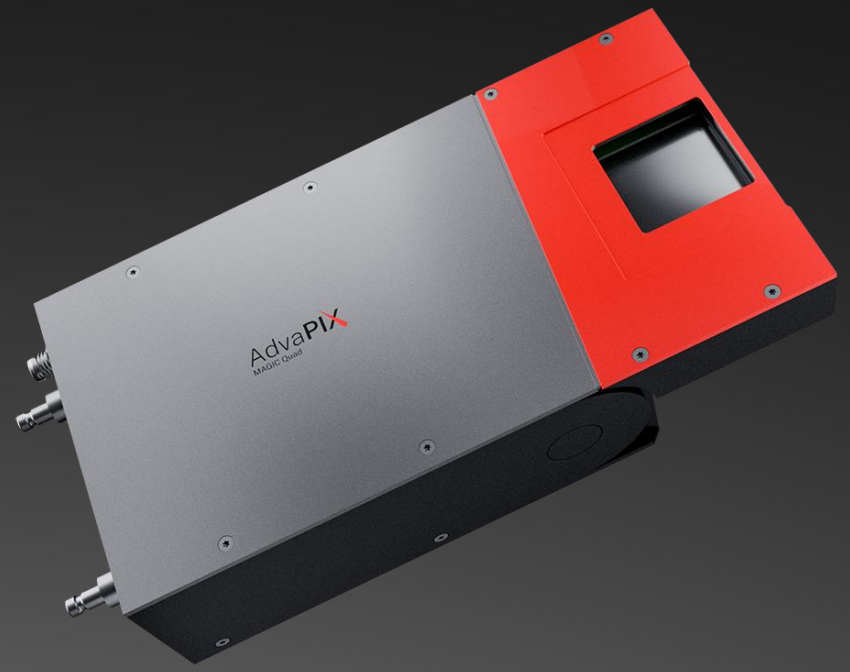
> This device combines several benefits: Electronics placed aside in sensitive areas, minimum amount of material behind sensors, which allows free path for primary X-ray beam. It uses a single USB3.0 interface to synchronize all four Timepix3 chips. This detector is a a two-chip configuration. The 28 x 14 millimeter sensitive area is rectangle shaped and offers the resolution of 131,072 pixels. Compared to the regular AdvaPIX with a single chip, this variation delivers a bigger sensitive area to collect more data in a single measurement.

Main Information – AdvaPIX MAGIC Quad

ADVACAM
Imaging the Unseen

> A precise and fast particle-tracking detector with four Timepix3 chips offering superior resolution, speed, and ionizing radiation detection possibilities. The shape of the case and inside electronics allows to use high energy X-ray beam without damaging the device.

Readout chip type:	Timepix3
Pixel pitch:	55 µm
Time resolution:	1,6 ns
Maximum readout speed:	47 million pixels / s
Power:	External 12 V
Readout chip type:	Timepix3
Pixel pitch:	55 µm
Time resolution:	1,6 ns



> The device combines several benefits: Electronics placed aside in sensitive areas, minimum amount of material behind sensors, the completely free path for primary X-ray beam passing through the (optional) hole. It uses a single USB3.0 interface providing synchronized operation of all four Timepix3 chips. AdvaPIX MAGIC Quad is the world's first photon-counting detector that operates in list data-driven mode. This means every radiation hit is recorded into a continuous data stream. The device measures each detected quanta's position, energy, and time-of-arrival.