MINIATURIZED AND LOW POWER CAMERA

The Timepix3 detector is position, energy and time sensitive. It digitally registers the position, energy, time of arrival and track shape of each ionizing particle (e.g. X-ray photon). The other measures can be often calculated from the track shape (particle type, direction of flight, LET, charge etc.).

^ DVACAM — MINIPIX_{TPX3}



Main Features

Readout chip type
Sensor material
Pixel size
Sensor resolution
Readout Speed
Dark current
Interface
Dimensions
Weight

Timepix 3
Si or CdTe
55 x 55 µm
256 x 256 pixels
2.35 Million hits/s
none
USB 2.0 (High-Speed)
80 x 21 x 14 mm
30 g

APPLICATIONS

| Spectral X-ray imaging

X-ray fluorescence imaging, X-ray radiography (angle and energy)

Energy dispersive XRD, SAXS or WAXS

Monochromatic X-ray source is NOT needed!

Spectral gamma ray imaging

Scintigraphy or SPECT, radiography with isotopes

Radiation monitor

Particle type sorting, spectroscopy, directional sensitivity

Gamma camera

Special shielded box and collimators available

Compton camera

Special software module available for image reconstruction.







