

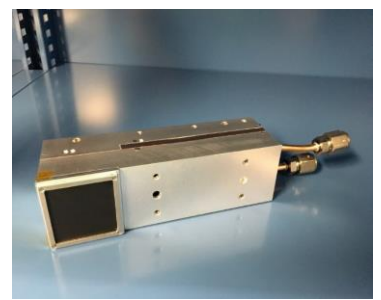
## ePix100 Specifications

With a 50um pixel size, the ePix100 provides one of the highest resolutions of all the detectors available at LCLS. Unlike the Rayonix which has a 44um maximum pixel resolution but suffers in readout speed, the ePix is capable of running at a 120 Hz frame rate. Used in both soft and hard X-ray applications, multiple ePix detectors can be installed and read in-sync in order to expand the cross section covered by the detectors.

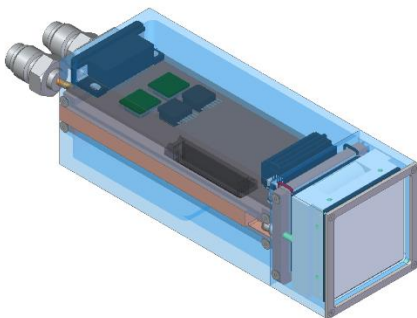
Types	Front-facing and side-facing
# of Pixels	4 x (384 x 352)
Pixel Size	50 um
Active Area Dimensions	38.4 x 35.2 mm <sup>2</sup>
Operating Temperature Range	4C to 20C (constant: must be above dew point)
Operating Pressure Range	Air or Vacuum
Operating Humidity Range	Avoid condensation on sensor plane
Max signal (8 keV photons)	100
Cooling	Water-cooled/Peltier
Frame Rate	120 Hz



Front-facing ePix



Side-facing ePix



### Other Specs:

- For in-air applications, dry nitrogen is used to lower humidity inside the detector.
- Typical combination of Temperature/Humidity for in-air applications is below 10C at less than 10% humidity.

### Analysis Tools:

- Offline analysis software:
  - o ssh to pslogin.slac.stanford.edu
  - o ssh to psana.slac.stanford.edu
  - o /reg/g/pcds/dist/pds/ami-current/build/ami/bin/x86\_64-linux-opt/offline\_ami

### Contact:

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