

# LAPPD™

## LARGE AREA PICOSECOND PHOTODETECTOR

Enabling the vision of tomorrow through experimental scientific discovery.

Incom's LAPPD™ is the world's largest flat panel position sensitive MCP based photodetector with picosecond level timing resolution. The LAPPD™ was developed in partnership with the Department of Energy, Argonne National Labs, and the University of Chicago with the vision to explore the elementary constituents of matter and energy, the interactions between them, and the nature of space and time. After nearly ten years of development, Incom is proud to bring this revolutionary technology to market.

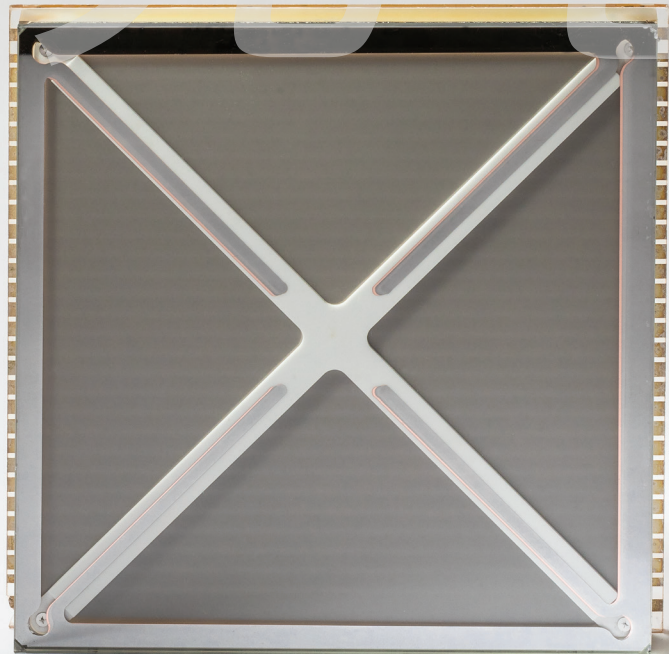
### FEATURES

- Large area 200 mm x 200 mm
- Quantum Efficiency > 20% (90% uniformity)
- Chevron pair of 203 mm x 203 mm ALD-GCA-MCP's
- Gain >  $1 \times 10^7$
- Independent control of voltage to the photocathode and MCPs
- High temporal resolution
- 1mm Spatial resolution
- Dark count rate less than 150 Hz/s/Cm<sup>2</sup>

### APPLICATIONS

- High energy physics
- Nuclear physics
- Medical imaging
- Proton Beam therapy
- X- Ray imaging,
- PET
- Neutron detection
- Neutrino interaction

### 20 CM SQUARE LAPPD™



## A CLOSER LOOK

Incom's tillable 20 cm square LAPPD™ is seen in this exploded view. This revolutionary detector utilizes Incom's proprietary microchannel plate technology in a chevron pair.

