

QA Detector for Particle Therapy

Lexitek's Quality Assurance (QA) detector enables accurate imaging of particle therapy treatment plans prior to their delivery. A custom scintillator specialized for each application emits light proportional to incident hadron flux which is imaged with fold mirror and lens onto a scientific-grade CCD camera. Both the shutter opening/closing and CCD readout can be triggered by external logic signals so treatments delivered by scanned particle beams can be measured and compared with treatment plans.



FEATURES/SPECIFICATIONS

- Custom, easily interchanged scintillators
- < 1x1 mm resolution, ~0.5 mm square pixels
- Up to 40 cm x 40 cm field size
- Up to 100 m cable from detector to control computer
- Exposure times from 10 ms - 3 hrs
- Low-noise cooled scientific CCD, 16-bit readout
- Electronic focus and aperture control
- User configurable TTL compatible external triggering and readout
- Detection plane 5 mm behind entrance window
- Configurable for direct mount to nozzle with micron repeatability
- Internal LED light source and grid target for calibration
- Records gantry position (onboard tilt angle sensor)
- Lightweight (15kg) for one person installation

Related products: [Dosimetric Scintillator System](#)

Please consult us with your custom requirements.

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