

## PULSAR® - Positron Tracer Production Systems

The PULSAR® PET Isotope Production systems are linac based proton accelerators designed to replace large and demanding cyclotron systems for the production of positron emitting isotopes. Large amounts of fluorine-18, carbon-11, nitrogen-13, and oxygen-15 can be produced for synthesis into compounds used in oncology, cardiology, neurology, and molecular imaging. The radio-labeled glucose analog, FDG, can be synthesized and distributed for use in Positron Emission Tomography.

The PULSAR® PET Isotope Production system consists of:

- ▶ The PL-7, a 7MeV proton linear accelerator
- ▶ Target ladder with targets
- ▶ Target shield
- ▶ Automated control system



*PULSAR® system with shield.*

PULSAR® systems set the new standard for the production of positron radiotracers. They are reliable, low-cost solutions to the growing need for positron emitting isotopes and are the next generation of positron radiotracer production equipment. PULSAR® units incorporate the latest in patented compact rf ion linac technology integrated with high production yield targets and advanced chemistry process modules. The features of PULSAR® systems make them the superior alternative to cyclotron-based systems for the production of positron radiotracers:

- Lowest life-cycle cost (=capital costs + facility costs + operating costs + residual value)
- Minimum space requirements <1000 ft<sup>2</sup>
- Available as mobile unit installed in a [Medical Coaches](#) trailer
- Proven performance and demonstrated reliability
- Simple operation and maintenance