



BG-95 Self-Shielded Cyclotron for ^{13}N Ammonia

**Ideal for Nuclear Cardiology/
Oncology Applications**

- Integrated shielded $^{13}\text{NH}_3$ chemistry module
- Low energy compact system, can be placed next to PET, PET/CT
- Automated quality control testing
- Can be paired with Cardiac PET Tomograph for a complete Cardiac PET Solution
- Easy to operate push-button graphic interface

B6–15 MeV Compact High Current/ Variable Energy Proton Cyclotron

- 1–1000 μA extracted beam current
- Capable of producing the following isotopes:
 ^{18}F , ^{68}Ga , ^{89}Zr , $^{99\text{m}}\text{Tc}$, ^{11}C , ^{13}N , ^{15}O , ^{64}Cu , ^{67}Ga ,
 ^{111}In , ^{124}I , ^{225}Ac , ^{103}Pd , ^{44}Sc and more
- Up to 5×10^{13} neutrons per second from external target
- 21 stripping foils at each stripping port for two minute rapid change



Isotope Production Capabilities | **Best 15 Isotopes**

PET	
Isotope	Application
Carbon-11	Broad Substitution
Nitrogen-13	Ammonia: blood flow
Oxygen-15	Blood flow, volume, oxygen utilization
Fluorine-18 aqueous	FDG mainly, many others
Fluorine-18 gas	Radiolabeling from gas phase
Copper-64	Integration through chelation chemistry
Iodine-124	Monoclonal antibodies

SPECT	
Isotope	Application
Gallium-67	Fe analog, inflammatory lesions
Technetium-99m	Many

Therapeutic	
Isotope	Application
Palladium-103	Interstitial implants, brachytherapy

