GE Discovery 610 PET/CT – Site Planning Guide

1. Room Dimensions & Layout

The GE Discovery 610 PET/CT system requires a well-planned layout to accommodate the scanner, control room, and ancillary equipment. While specific dimensions can vary based on facility design, it's crucial to ensure sufficient space for:

- - Scanner Gantry and Patient Table
- - Operator's Console
- - Power Distribution Units (PDU)
- - Uninterruptible Power Supply (UPS)
- - Storage Cabinets

For detailed architectural layouts and equipment placement, refer to GE Healthcare's project management documentation, which includes renderings and equipment schedules for the Discovery PET/CT 610 systems.

2. Electrical & Cooling Requirements

The system's components have specific electrical and cooling needs:

- Power Specifications:
- - Voltage: 400–480V, 3-phase
- - Frequency: 50/60 Hz
- - Typical Current: 40–60 Amps depending on configuration
- Cooling Requirements:
- - Heat Output: Approximately 35,000 to 40,000 BTU/hr
- - Dedicated HVAC system required to maintain stable room temperatures

3. System Weight & Footprint

Key components and their approximate weights:

- - Scanner Gantry: ~8,529 lbs
- - PDU: ~800 lbs
- - UPS: ~619 lbs
- - Operator Console: ~341 lbs

4. Radiation Shielding

Compliance with local, state, and federal radiation safety regulations is mandatory. This includes appropriate shielding in walls, doors, and observation windows to protect staff and patients from unnecessary exposure.

5. Workflow & Patient Safety

Efficient patient flow and safety are paramount:

- - Clear Signage: To guide patients and staff
- - Emergency Exits: Easily accessible and unobstructed
- - Infection Control: Materials and finishes that support cleanliness

6. Additional Resources

For comprehensive guidelines on site preparation, including room layouts, electrical specifications, and safety protocols, consult the following resources:

- - University of Washington PET Technical Procedures Manual: Offers acquisition parameters and reconstruction settings for GE Discovery PET/CT scanners.