

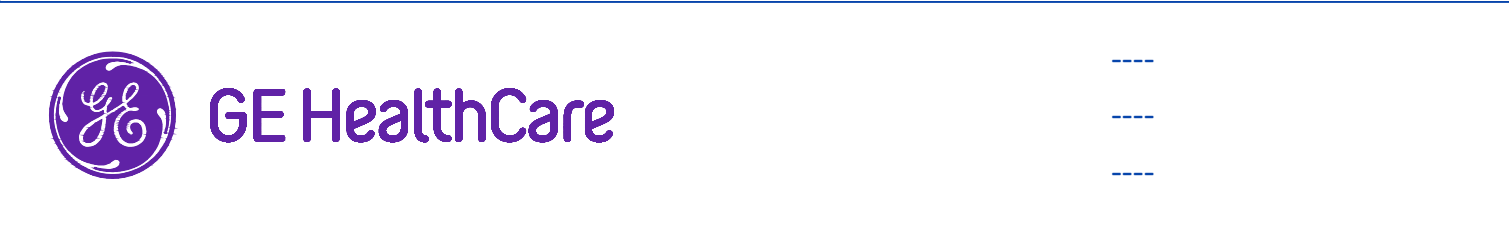



REV	DATE	MODIFICATIONS
01 - C1 - Cover Sheet		10 - M1 - HVAC
02 - C2 - Disclaimer - Site Readiness Checklist		11 - E1 - Electrical Notes
03 - A1 - General Notes		12 - E2 - Electrical Layout
04 - A2 - Equipment Layout		13 - E3 - Electrical Elevations
05 - A3 - Equipment Dimensions		14 - E4 - Power Requirements
06 - A4 - Delivery		15 - E5 - Electrical Details - Interconnect
07 - S1 - Structural Notes		
08 - S2 - Structural Layout		
09 - S3 - Structural Details (1)		

A mandatory component of this drawing set is the GE HealthCare Pre Installation manual. Failure to reference the Pre Installation manual will result in incomplete documentation required for site design and preparation.  
 Pre Installation documents for GE HealthCare products can be accessed on the web at: <https://www.gehealthcare.com/support/manuals>

GE HealthCare does not take responsibility for any damages resulting from changes on drawings made by others. Errors may occur by not referring to the complete set of final issue drawings. GE HealthCare cannot accept responsibility for any damage due to the partial use of GE HealthCare final issue drawings, however caused. All dimensions are in millimeters unless otherwise specified. Do not scale from printed pdf files. GE HealthCare accepts no responsibility or liability for defective work due to scaling from these drawings.

**Typical**  
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## MyoSPECT FINAL STUDY

Drawn by	Verified by	Concession	GON/Quote	PIM Manual	Rev
RET	CPC	-	-	5860425-1EN	3
Format	Scale	File Name		Date	Sheet
A3	1/4"=1'-0"	EN-NUC-TYP-MYOSPECT-NF.DWG		01/Oct/2025	01/15

## DISCLAIMER

### GENERAL SPECIFICATIONS

- GE is not responsible for the installation of developers and associated equipment, lighting, cassette trays and protective screens or derivatives not mentioned in the order.
- The final study contains recommendations for the location of GE equipment and associated devices, electrical wiring and room arrangements. When preparing the study, every effort has been made to consider every aspect of the actual equipment expected to be installed.
- The layout of the equipment offered by GE, the dimensions given for the premises, the details provided for the pre-installation work and electrical power supply are given according to the information noted during on-site study and the wishes expressed by the customer.
- The room dimensions used to create the equipment layout may originate from a previous layout and may not be accurate as they may not have been verified on site. GE cannot take any responsibility for errors due to lack of information.
- Dimensions apply to finished surfaces of the room.
- Actual configuration may differ from options presented in some typical views or tables.
- If this set of final drawings has been approved by the customer, any subsequent modification of the site must be subject to further investigation by GE about the feasibility of installing the equipment. Any reservations must be noted.
- The equipment layout indicates the placement and interconnection of the indicated equipment components. There may be local requirements that could impact the placement of these components. It remains the customer's responsibility to ensure that the site and final equipment placement complies with all applicable local requirements.
- All work required to install GE equipment must be carried out in compliance with the building regulations and the safety standards of legal force in the country concerned.
- These drawings are not to be used for actual construction purposes. The company cannot take responsibility for any damage resulting therefrom.

### CUSTOMER RESPONSIBILITIES

- It is the responsibility of the customer to prepare the site in accordance with the specifications stated in the final study. A detailed site readiness checklist is provided by GE. It is the responsibility of the customer to ensure all requirements are fulfilled and that the site conforms to all specifications defined in the checklist and final study. The GE Project Manager of Installation (PMI) will work in cooperation with the customer to follow up and ensure that actions in the checklist are complete, and if necessary, will aid in the rescheduling of the delivery and installation date.
- Prior to installation, a structural engineer of record must ensure that the floor and ceiling is designed in such a way that the loads of the installed system can be securely borne and transferred. The layout of additional structural elements, dimensioning and the selection of appropriate installation methods are the sole responsibility of the structural engineer. Execution of load bearing structures supporting equipment on the ceiling, floor or walls are the customer's responsibility.

### RADIO-PROTECTION

- Suitable radiological protection must be determined by a qualified radiological physicist in conformation with local regulations. GE does not take responsibility for the specification or provision of radio-protection.

**THE UNDERSIGNED, HEREBY CERTIFIES THAT I HAVE READ AND APPROVED THE PLANS IN THIS DOCUMENT.**

DATE	NAME	SIGNATURE

## CUSTOMER SITE READINESS REQUIREMENTS

### REQUIRED MANUALS FOR SYSTEM PRE-INSTALLATION

Description	Document Number*
Product specific Pre-installation Manual	Refer to cover page
*documents can be accessed in multiple languages at <a href="https://www.gehealthcare.com/support/manuals">https://www.gehealthcare.com/support/manuals</a>	

- A mandatory component of this drawing set is the GE HealthCare Pre-installation manual. Failure to reference the Pre-installation manual will result in incomplete documentation required for site design and preparation.
- The items on the GE HealthCare Site Readiness Checklist **DOC2949061** and Worksheet **DOC2949068** are **REQUIRED** to facilitate equipment delivery to the site. Equipment will not be delivered if these requirements are not satisfied.
  - Any deviation from these drawings must be communicated in writing to and reviewed by your local GE HealthCare installation project manager prior to making changes.
  - Make arrangements for any rigging, special handling, or facility modifications that must be made to deliver the equipment to the installation site. If desired, your local GE HealthCare installation project manager can supply a reference list of rigging contractors.
  - New construction requires the following;
    1. Secure area for equipment,
    2. Power for drills and other test equipment,
    3. Restrooms.
  - Provide for refuse removal and disposal (e.g. crates, cartons, packing)
  - It is required to minimize vibrations within the scan room. It is the customer's responsibility to contract a vibration consultant/engineer to implement site design modifications to meet the GE vibration specification. Refer to the system Pre-installation manual for vibration specifications.

## ENVIRONMENT

### ALTITUDE

- Operating altitude: from -150 m [-492 ft] to 3000 m [9,843 ft].

### MAGNETIC FIELD SPECIFICATIONS

- In order to avoid interference on the system, the static field limits from the surrounding environment must be less than 1 Gauss in both the scan and the operator rooms.
- The ambient static magnetic field in the system location must be less than 1 Gauss.
- The ambient AC magnetic fields must be below 0.01 Gauss peak.

### MAXIMUM GANTRY AUDIBLE NOISE LEVEL

- The system creates acoustic noise. In compliance with IEC 601-1-1 standard the measured noise (at 1 m [3.3 ft] distance away from the system) is less than 70 db. It is recommended that the wall and ceiling surface is of a sound dampening material to avoid noise reverberation and amplification.

### VIBRATION SPECIFICATIONS

- The system components are sensitive to vibration in the frequency range of 0.5 to 20 Hz, depending on the amplitude of the vibration. It is the customer's responsibility to contract a vibration consultant or qualified engineer to verify that these specifications are met and implement an appropriate solution.
- To minimize vibrations, the system must be installed on a solid floor, as far as possible from vibration sources (parking lots, roadways, subways, heliports, trains, hallways, elevators, hospital power plants... etc).

## RADIOACTIVE ISOTOPES

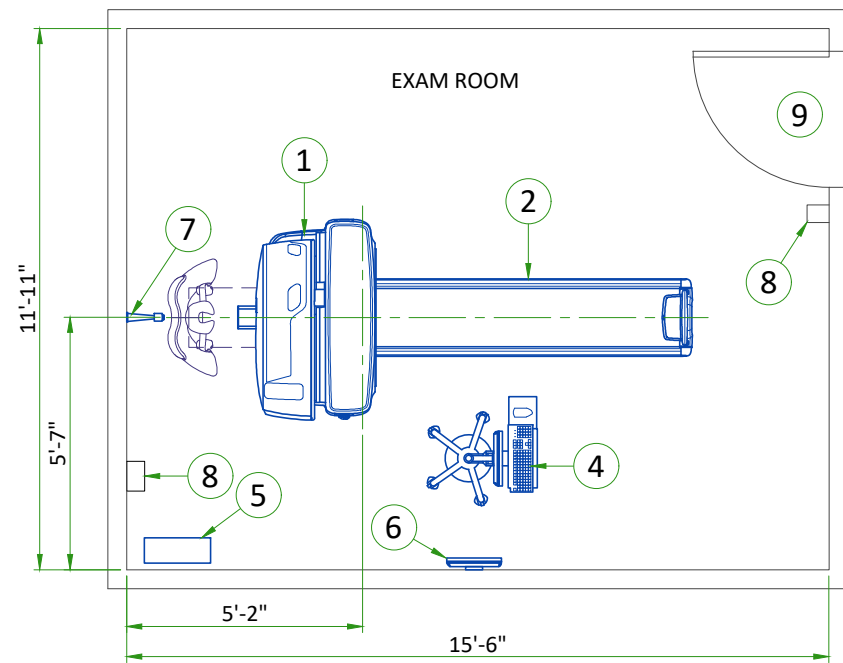
### USING RADIOACTIVE ISOTOPES

Since the system involves the use of radioactive isotopes, compliance with Nuclear Regulatory Commission regulations, or similar regulatory requirements (depending on the country), must be adhered to and all permissions obtained well in advance. It is recommended that regulatory compliance is arranged early in the site planning process.

It is essential that all preparations are completed so that required source materials can be obtained prior to installation, including calibration sources. Take into consideration that these sources may have fairly long delivery lead times, yet may also have a short half life, so that it may not be advisable to store them over long periods of time.

### RADIOACTIVE ISOTOPES FOR SYSTEM CALIBRATION

DESCRIPTION	
Basic calibration	Site has license for Tc <sup>99m</sup>
	Tc <sup>99m</sup> will be available during installation
Isotopes to be used at site are available for installation. Note: Specify age and strength	Co <sup>57</sup> (Line Source)



**LEGEND**

A	GE SUPPLIED	D	AVAILABLE FROM GE
B	GE SUPPLIED/CONTRACTOR INSTALLED	E	EQUIPMENT EXISTING IN ROOM
C	CUSTOMER/CONTRACTOR SUPPLIED AND INSTALLED	*	ITEM TO BE REINSTALLED FROM ANOTHER SITE

BY	ITEM	DESCRIPTION	MAX HEAT OUTPUT (BTU/h)	WEIGHT (lbs)	MAX HEAT OUTPUT (W)	WEIGHT (kg)
A	1	GANTRY WITH DETECTORS	2387	1797	700	815
A	2	PATIENT TABLE	682	831	200	377
D	3	MAIN DISCONNECT PANEL	-	-	-	-
A	4	ACQUISITION STATION CART	-	-	-	-
A	5	ACQUISITION STATION COMPUTER	512	25	150	11.25
A	6	PATIENT MONITOR FOR CAMERA	-	8	-	3.6
A	7	PATIENT CAMERA	-	-	-	-
C	8	SHELF FOR EMO				
C	9	MINIMUM OPENING FOR EQUIPMENT DELIVERY IS 910 mm w x 1700 mm [36 in x 67 in] CONTINGENT ON A 1520 mm [60 in] CORRIDOR WIDTH				

**EXAM ROOM HEIGHT**

FINISHED FLOOR TO SLAB HEIGHT	TBD
FALSE CEILING HEIGHT	8'-9"

For Accessory Sales: (866) 281-7545 Options 1, 2, 1, 2 or mail to: [gehaccessoriesales@ge.com](mailto:gehaccessoriesales@ge.com)

## GANTRY WITH PATIENT TABLE

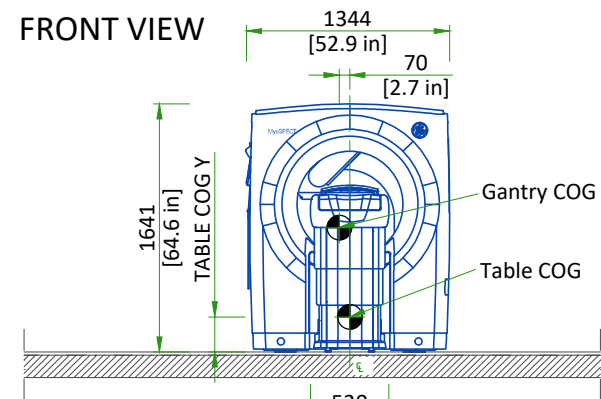


TABLE COG Y		
TABLE HEIGHT	NO PATIENT	227 KG [500 LB] PATIENT
540 [21.3 in]	232 [9.1 in]	352 [13.9 in]
880 [34.6 in]	377 [14.8 in]	629 [24.8 in]
1000 [39.4 in]	429 [16.9 in]	653 [25.7 in]

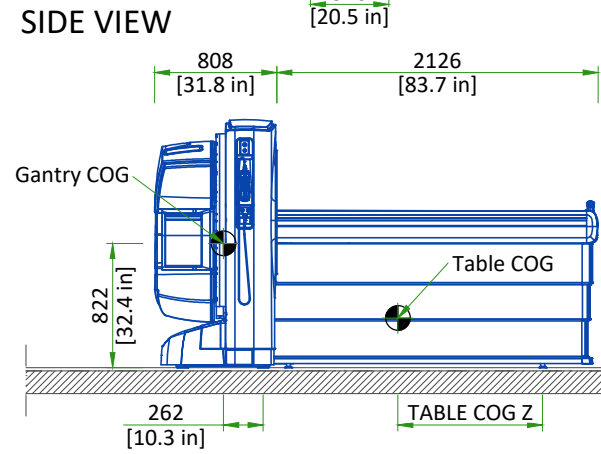
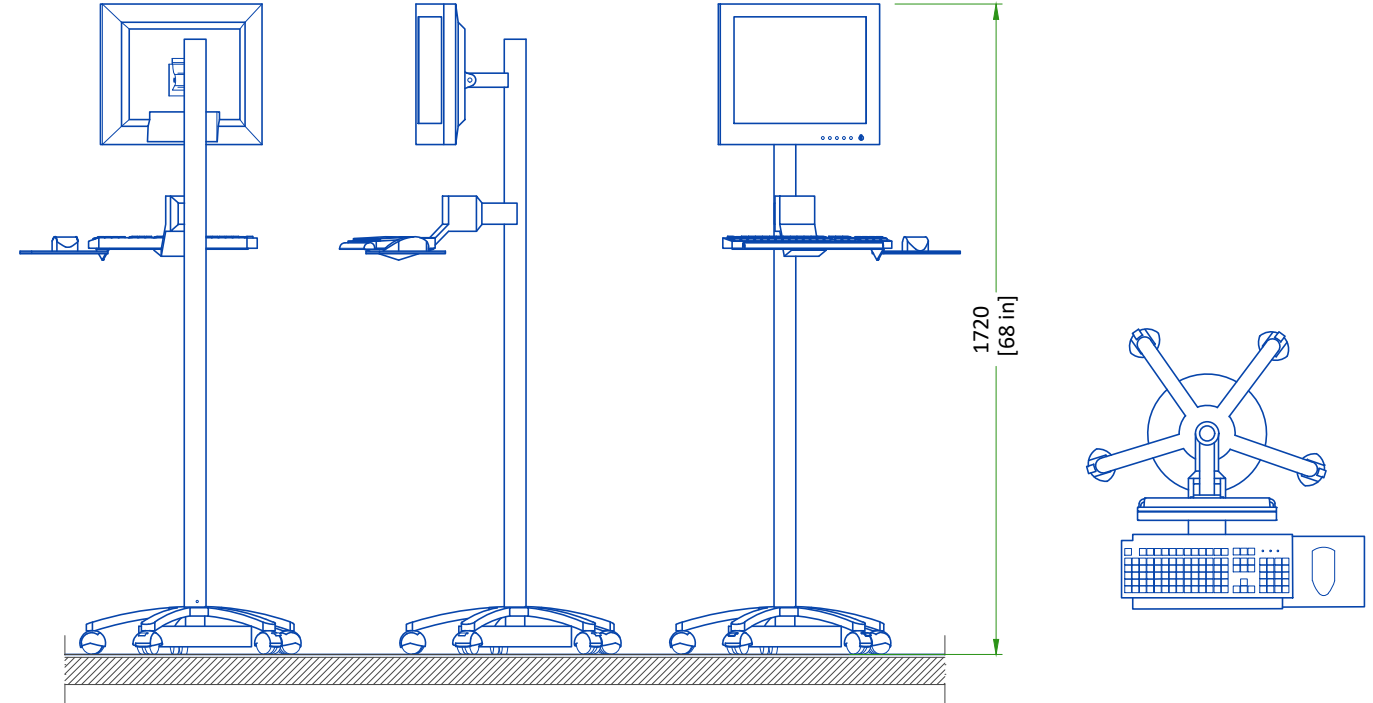


TABLE COG Z		
CRADLE POSITION	NO PATIENT	227 KG [500 LB] PATIENT
Retracted	958 [37.7 in]	966 [38 in]
Extended	958 [37.7 in]	1409 [55.5 in]

● Center of gravity

SCALE 1:50

## ACQUISITION STATION ON CART



SIDE VIEWS

TOP VIEW

## DELIVERY

### THE CUSTOMER/CONTRACTOR SHOULD:

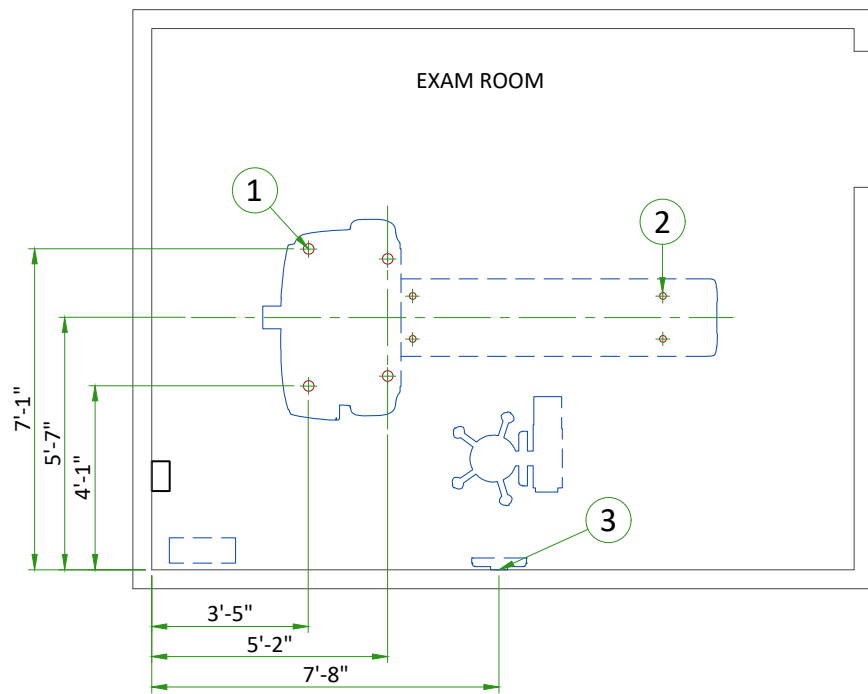
- Provide an area adjacent to the installation site for delivery and unloading of the GE equipment.
- Ensure that the dimensions of all doors, corridors, ceiling heights are sufficient to accommodate the movement of GE equipment from the delivery area into the definitive installation room.
- Ensure that access routes for equipment will accommodate the weights of the equipment and any transportation, lifting and rigging equipment.
- Ensure that all necessary arrangements for stopping and unloading on public or private property not belonging to the customer have been made.

### DIMENSIONS OF DELIVERY WITH DOLLY TRANSPORT EQUIPMENT

EQUIPMENT	DIMENSIONS		WEIGHT
GANTRY	LENGTH	2000 mm [78.7 in]	815 kg [1797 lb]
	WIDTH	910 mm [35.8 in]	
	HEIGHT	1700 mm [66.9 in]	
PATIENT TABLE	LENGTH	2300 mm [90.6 in]	377 kg [831 lb]
	WIDTH	910 mm [35.8 in]	
	HEIGHT	Any	

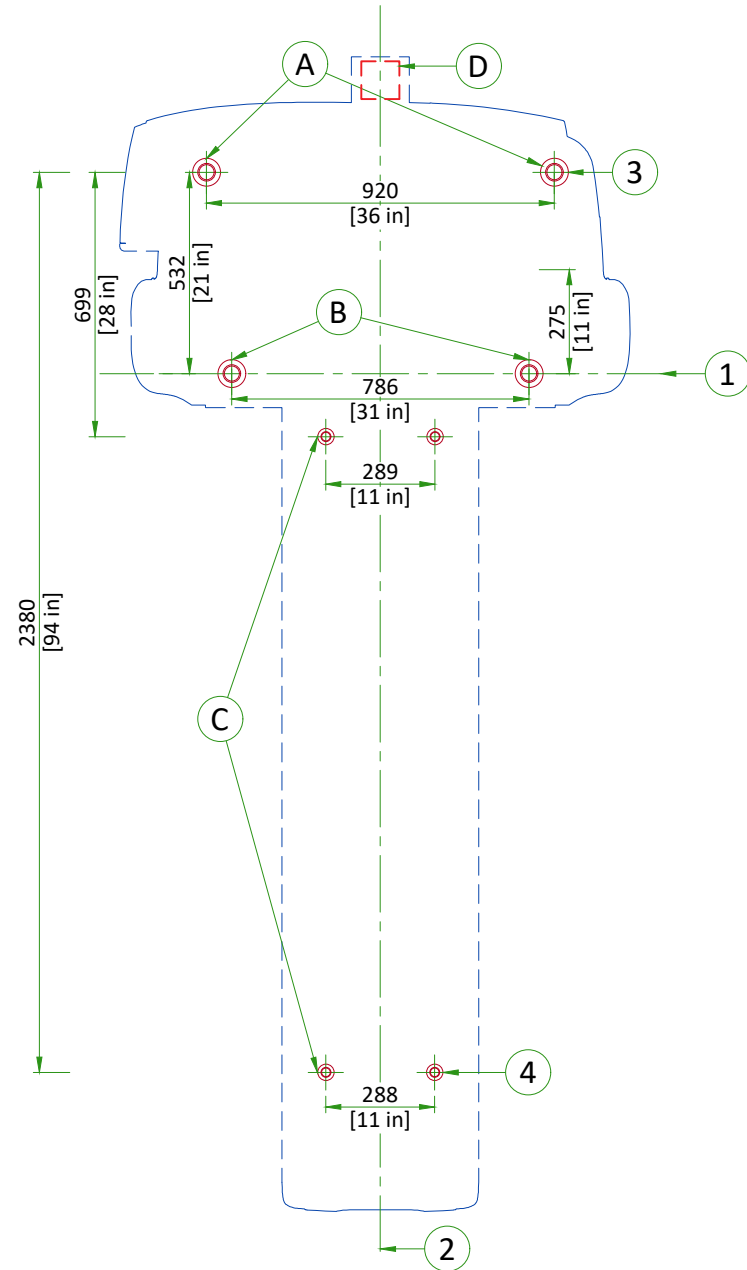
## STRUCTURAL NOTES


- All units that are wall mounted or wall supported are to be provided with supports where necessary. Wall supports are to be supplied and installed by the customer or his contractors. See plan and detail sheets for suggested locations and mounting hole locations.
- Floor slabs on which equipment is to be installed must be flat and level to specifications.
- Dimensions are to finished surfaces of room.
- For seismic regions ensure supports span three members.
- Customers contractor must provide all penetrations in post tension floors.
- Customers contractor must provide and install any non-standard anchoring. Documents for standard anchoring methods are included with GE equipment drawings for geographic areas that require such documentation.
- Customers contractor must provide and install hardware for "through the floor" anchoring and/or any bracing under access floors. This contractor must also provide floor drilling that cannot be completed because of an obstruction encountered while drilling by the GE installer such as rebar etc.
- It is the customer's responsibility to perform any floor or wall penetrations that may be required. The customer is also responsible for ensuring that no subsurface utilities (e.g., electrical or any other form of wiring, conduits, piping, duct work or structural supports (i.e. post tension cables or rebar)) will interfere or come in contact with subsurface penetration operations (e.g. drilling and installation of anchors/screws) performed during the installation process. To ensure worker safety, GE installers will perform surface penetration operations only after the customer's validation and completion of the "GE surface penetration permit"



ITEM	DESCRIPTION
1	Gantry leveling pads (see Structural Details)
2	Patient table leveling pads (see Structural Details)
(CONTRACTOR SUPPLIED & INSTALLED)	
3	Structural wall backing

## LOADING DISTRIBUTION TO THE FLOOR



- (1) Gantry Axis
- (2) Longitudinal Axis
- (3) 4 Gantry leveling pads
- (4) 4 Patient Table leveling pads
-  Leveling pads

- A. Gantry rear pads 183 Kg [403 lb] on each  $\varnothing 90$  mm [ $\varnothing 3.5$  in] pad
- B. Gantry front pads 225 Kg [496 lb] on each  $\varnothing 90$  mm [ $\varnothing 3.5$  in] pad
- C. Patient Table load 377 Kg [831 lb] distributed on 4 pads
- D. Cable access

SCALE 1:25

## FLOOR SPECIFICATIONS

### FLOOR LOADING

- For seismic installations, in order to enable system mounting using the supplied floor anchors, concrete floors must have a minimum cube strength of  $f'c = 4350$  psi (30 MPa) at 28 days (curing time) for 25/30 concrete.
- It is the customer/contractor responsibility to have appropriate tests performed to determine and measure concrete strength

### FLOOR LEVELING SPECIFICATIONS

Floor Leveling Area (covering the entire planned area of table and gantry surface)	2900 mm x 1500 mm [9.5 ft x 4.9 ft]
Slope	less than 30 mm [1 3/16 in] over 4300 mm [14.1 ft]
Flatness	5 mm [0.2 in] over 1500 mm [4.9 ft] in any direction
Floor surface	Floor should have one single poured surface

## TEMPERATURE AND HUMIDITY SPECIFICATIONS

### IN-USE CONDITIONS

	EXAM/CONTROL ROOM		
	Min	Recommended	Max
Temperature	18°C [64°F]	22°C [72°F]	26°C [79°F]
Temperature gradient	≤ 3°C/h [≤ 5.4°F/h]		
Relative humidity (1)	30% to 60%		
Humidity gradient	≤ 5%/h		

### STORAGE CONDITIONS (>48 Hours)

	Gantry and Table (2)
Temperature	+5°C to +50°C [39°F to 80°F]
Relative humidity (1)	10% to 85%
Air pressure	700 hPa to 1060 hPa

- (1) non-condensing
- (2) System and detectors (triplets) must be securely closed in original packaging.

### AIR RENEWAL

According to local standards.

#### NOTE

In case of using air conditioning systems that have a risk of water leakage it is recommended not to install it above electric equipment or to take measures to protect the equipment from dropping water.

## HEAT DISSIPATION

ROOM	DESCRIPTION	HEAT DISSIPATION (kW)	HEAT DISSIPATION (BTU/hr)
		MAX	MAX
Exam Room	Gantry	0.70	2390
	Patient Table	0.20	682
	Acquisition Station Computer	0.15	512
	NM UPS	0.44	1500
	<b>TOTAL</b>	<b>1.49</b>	<b>5084</b>

## CONNECTIVITY REQUIREMENTS

Your new GE Healthcare imaging modality will require local and remote connectivity to enable our full range of digital support:

- Local connectivity - This allows your system to connect to local devices such as PACS and modality worklist. We will require network information to configure the system(s), and a live ethernet port(s) prior to the delivery of the system(s).
- Remote connectivity - Your GE Healthcare service warranty includes InSite™ (applicable to InSite capable products), a powerful broadband-based service which enables digital tools that can help guard your hospital against equipment downtime and revenue loss by quickly connecting you to a GE Healthcare expert.

Depending on product family and software version, imaging systems can be connected in one of the following methods:

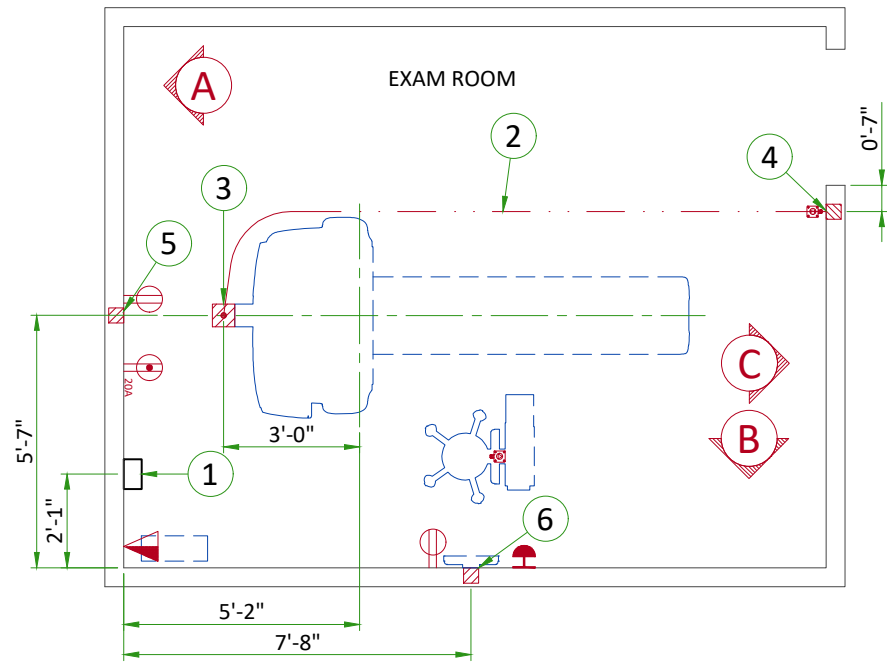
1. TLS over TCP Port 443 (Preferred method for new products) via:
  - a. DNS resolution
  - b. Customer-provided Proxy or
  - c. GE Proxy (Available in some regions)
2. Site-to-Site IPsec VPN tunnel

Please provide the GE project manager with the contact information for the resource that can provide information required to set up these connections. GEHC will send out communication to these contacts, which will include the project's Connectivity requirements, and a Connectivity form. This form will need to be completed and returned to GEHC prior to delivery of the system to ensure the system is tested and connectivity is enabled prior to the completion of the installation.

## ELECTRICAL NOTES

1. Aluminum or solid wires are not allowed.
2. Wire sizes given are for use of equipment. Larger sizes may be required by local codes.
3. It is recommended that all wires be color coded, as required in accordance with national and local electrical codes.
4. Conduit sizes shall be verified by the architect, electrical engineer or contractor, in accordance with local or national codes.
5. Convenience outlets are not illustrated. Their number and location are to be specified by others. Locate at least one convenience outlet close to the system control, the power distribution unit and one on each wall of the procedure room. Use hospital approved outlet or equivalent.
6. General room illumination is not illustrated. Caution should be taken to avoid excessive heat from overhead spotlights. Damage can occur to ceiling mounting components and wiring if high wattage bulbs are used. Recommend low wattage bulbs no higher than 75 watts and use dimmer controls (except MR). Do not mount lights directly above areas where ceiling mounted accessories will be parked.
7. Routing of cable ductwork, conduits, etc., must run direct as possible otherwise may result in the need for greater than standard cable lengths (refer to the interconnection diagram for maximum usable lengths point to point).
8. Conduit turns to have large, sweeping bends with minimum radius in accordance with national and local electrical codes.
9. In some cases GEHC will specify ground wires to be sized larger than code. In these situations, the GEHC specification must be followed.
10. A special grounding system is required in all procedure rooms by some national and local codes. It is recommended in areas where patients might be examined or treated under present, future, or emergency conditions. Consult the governing electrical code and confer with appropriate customer administrative personnel to determine the areas requiring this type of grounding system.
11. The maximum point to point distances illustrated on this drawing must not be exceeded.
12. Physical connection of primary power to GEHC equipment is to be made by customers electrical contractor with the supervision of a GEHC representative. The GEHC representative would be required to identify the physical connection location, and insure proper handling of GEHC equipment.
13. GEHC conducts power audits to verify quality of power being delivered to the system. The customer's electrical contractor is required to be available to support this activity.
14. Every installation is unique. The electrical contractor will be required to support the installation of the GEHC equipment by providing knockouts, grommeted openings, bushings, etc. as required. All power connections to be performed by the electrician.

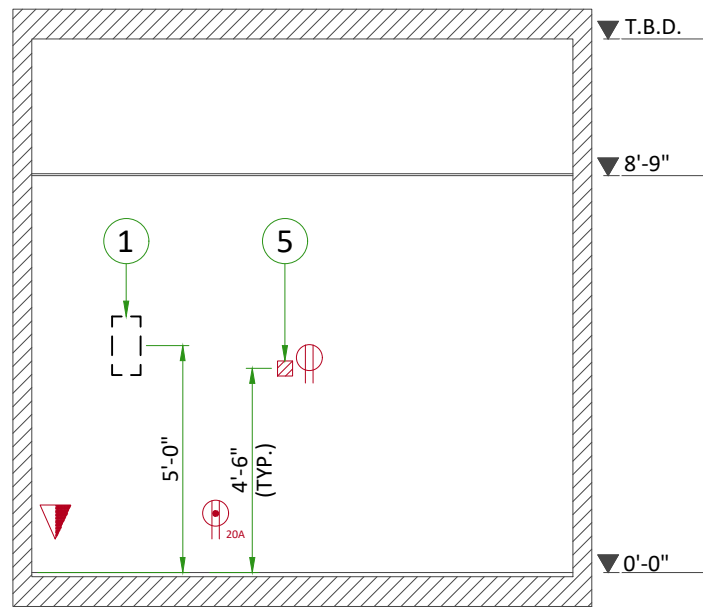
- All junction boxes, conduit, duct, duct dividers, switches, circuit breakers, cable tray, etc., are to be supplied and installed by customers electrical contractor. All junction boxes shall be provided with covers.
- Conduit and duct runs shall have gradual sweep radius bends.
- Conduits and duct above ceiling or below finished floor must be installed as near to ceiling or floor as possible to reduce run length.
- Ceiling mounted junction boxes illustrated on this plan must be installed flush with finished ceiling.
- All ductwork must meet the following requirements:
  1. Ductwork shall be metal with dividers and have removable, accessible covers.
  2. Ductwork shall be certified/rated for electrical power purposes.
  3. Ductwork shall be electrically and mechanically bonded together in an approved manner.
  4. PVC as a substitute must be used in accordance with all local and national codes.
- All openings in raceway and access flooring are to be cut out and finished off with grommet material by the customers contractor.
- Electrical contractor to provide measured pull strings in all conduit and raceway runs.
- Provide 10 foot pigtails at all junction points.
- Grounding is critical to equipment function and patient safety. Site must conform to wiring specifications shown on this plan.



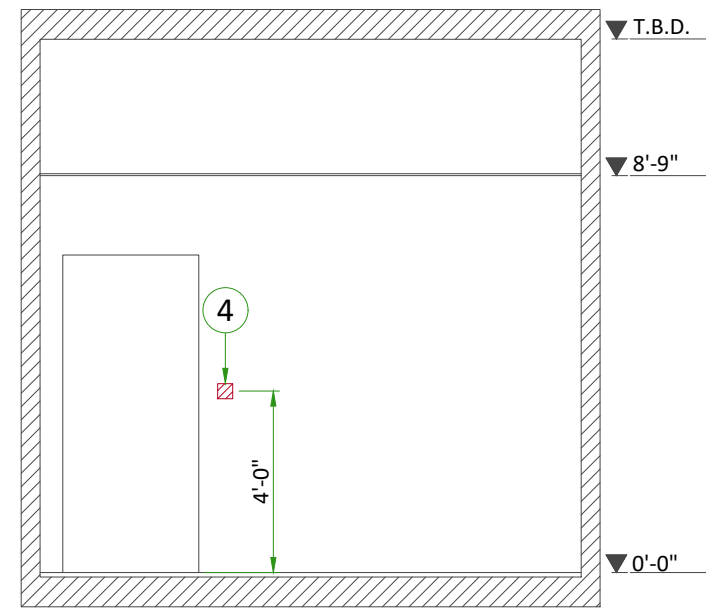
Item	Electrical Layout Item List
1	20 Amp Main Disconnect Panel with lockout/tagout
2	3/4" [20] conduit below floor
3	6" x 6" x 4" [150 x 150 x 100] surface floor box (Gantry)
4	4" x 4" x 4" [100 x 100 x 100] box (EMO Unit)
5	4" x 4" x 4" [100 x 100 x 100] box (Patient Positioning Camera)
6	4" x 4" x 4" [100 x 100 x 100] box (Patient Positioning Monitor)

ITEM	QTY	Electrical Outlet Legend
		Customer/contractor supplied and installed items unless otherwise specified. Height above floor determined by local codes unless otherwise specified.
		System emergency off (SEO), (recommended height 1.2m [48"] above floor)
		Duplex hospital grade, dedicated wall outlet 120-v, single phase power
		Network outlet
		20 Amp duplex hospital grade receptacle, powered from system Main Disconnect Panel

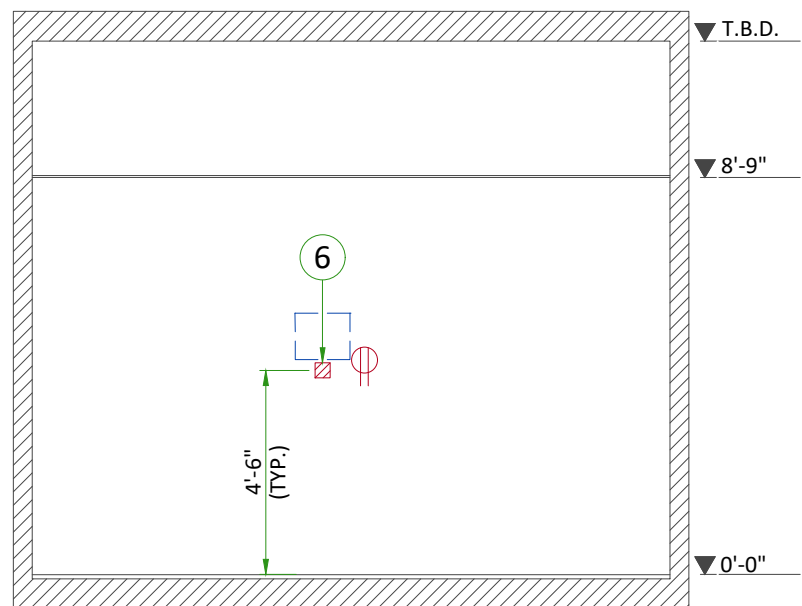
Additional Conduit Runs (Contractor Supplied and Installed)					
From (Bubble # / Item)	To (Bubble # / Item)	Qty	Size		
			In.	mm	
1 Phase Power	1 Main Disconnect Panel	1	As req'd	As req'd	
1 Main Disconnect Panel	System Emergency Off	1	1/2	13	
5 Patient Positioning Camera	6 Patient Positioning Monitor	1	2	50	



A



C



B

## POWER REQUIREMENTS

### POWER SUPPLY

POWER SUPPLY	<b>SINGLE PHASE+N+G 110/120/220/230/240 V ±10%</b>
FREQUENCIES	<b>50/60 Hz ±3 Hz</b>
MAXIMUM POWER DEMAND	<b>1.4 kVA</b>
AVERAGE (CONTINUOUS) POWER DEMAND	<b>0.6 kVA</b>

- For the convenience and safety of service, it is recommended for a lockout-tagout (LOTO) compatible Main Disconnect Panel (MDP) be installed in the room with the gantry.
- Power supply should come into a MDP containing the protective units and controls.
- The section of the supply cable should be calculated in accordance with its length and the maximum permissible voltage drops.
- There must be discrimination between supply cable protective device at the beginning of the installation (main low-voltage transformer side) and the protective devices in the MDP.

### SUPPLY CHARACTERISTICS

- Power input must be separate from any others which may generate transients (elevators, air conditioning, radiology rooms equipped with high speed film changers...).
- All equipment (lighting, power outlets, etc...) installed with GE system components must be powered separately.
- Phase imbalance 2% maximum.
- Maximum voltage variation at full load = 6% (Including line impedance).
- Transients must be less than 1500 V peak.

### GROUND SYSTEM

- Equipotential: The equipotential link will be by means of an equipotential bar. This equipotential bar should be connected to the protective earth conductors in the ducts of the non GE cableways and to additional equipotential connections linking up all the conducting units in the rooms where GE system units are located.

### CABLES

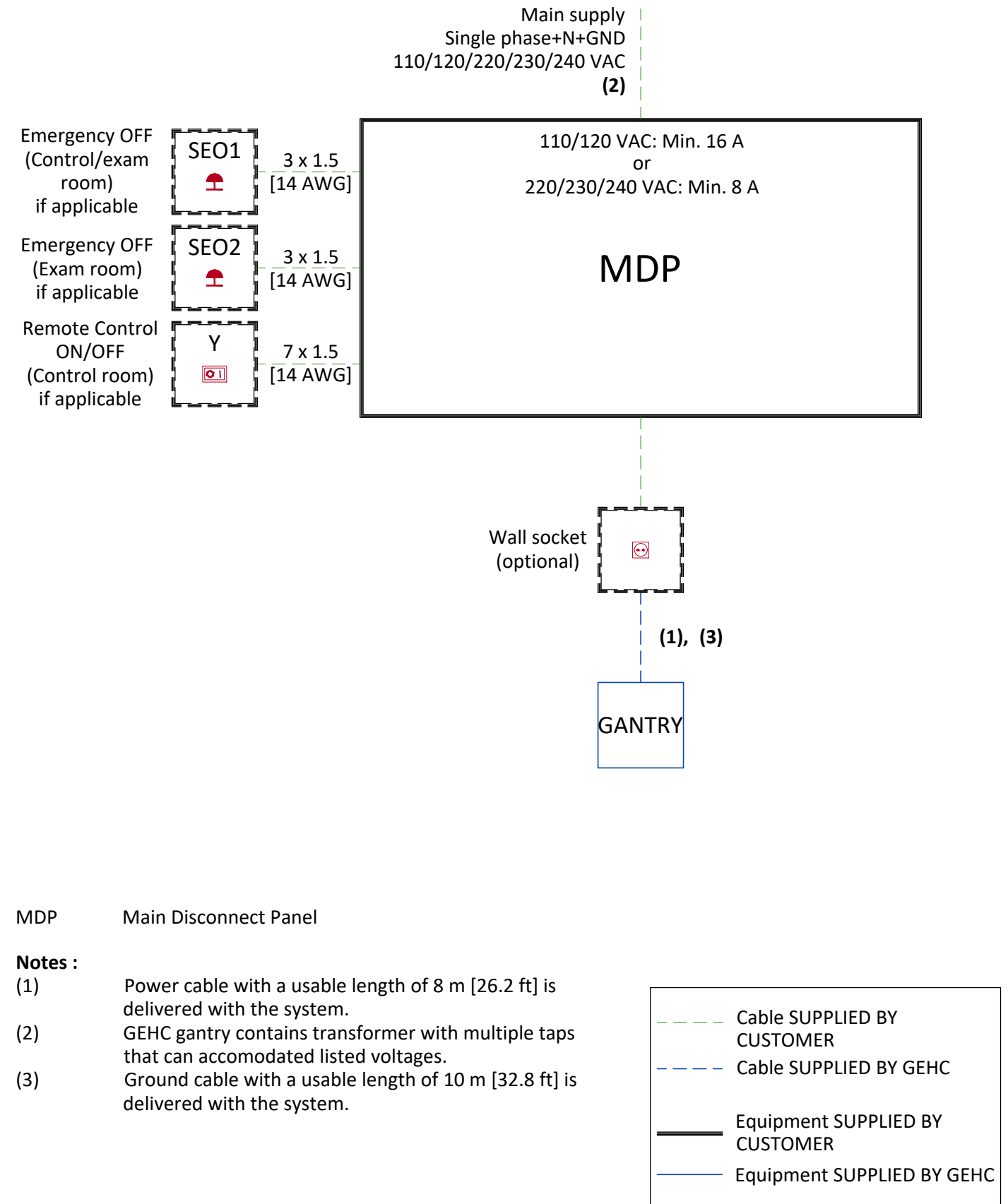
- Power and cable installation must comply with the distribution diagram below.
- All cables must be isolated and flexible, cable color codes must comply with standards for electrical installation.
- The cables from signaling and remote control (Y, SEO, L ...) will go to MDP with a pigtail length of 1.5 m [4.9 ft], and will be connected during installation. Each conductor will be identified and isolated (screw connector).

### CABLEWAYS

The general rules for laying cableways should meet the conditions laid down in current standards and regulations, with regard to :

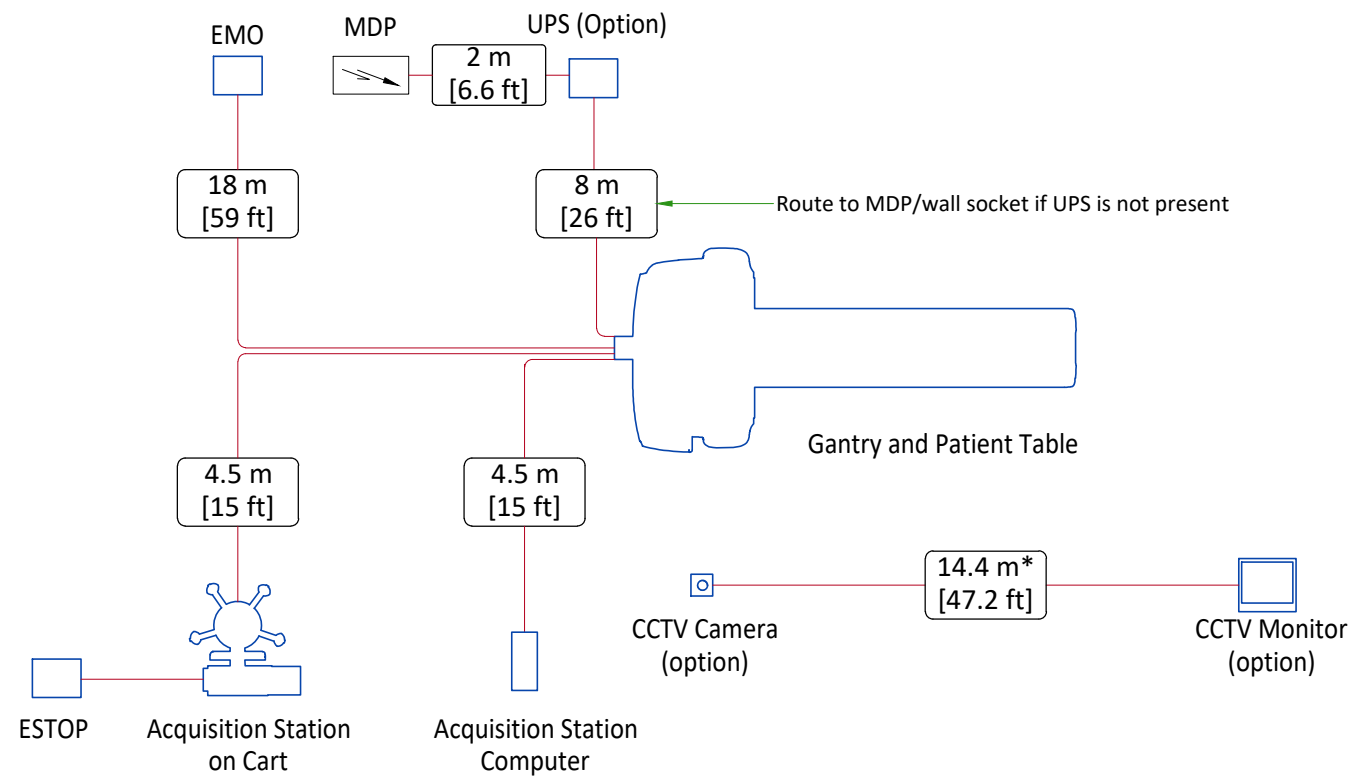
- Protecting cables against water (cableways should be waterproof)
- Protecting cables against abnormal temperatures (proximity to heating pipes or ducts)
- Protecting cables against temperature shocks
- Replacing cables (cableways should be large enough for cables to be replaced)
- Metal cableways should be grounded

## POWER DISTRIBUTION



**General note: The customer's electrician is to supply the hardware connections. If connectors are needed, they are to be supplied by the customer. Hospital grade connectors and plugs are required.**

# INTERCONNECTIONS



NOTE  
\*Can be increased to 20.4m [66.9 ft] by ordering 5845127 from GSPO.