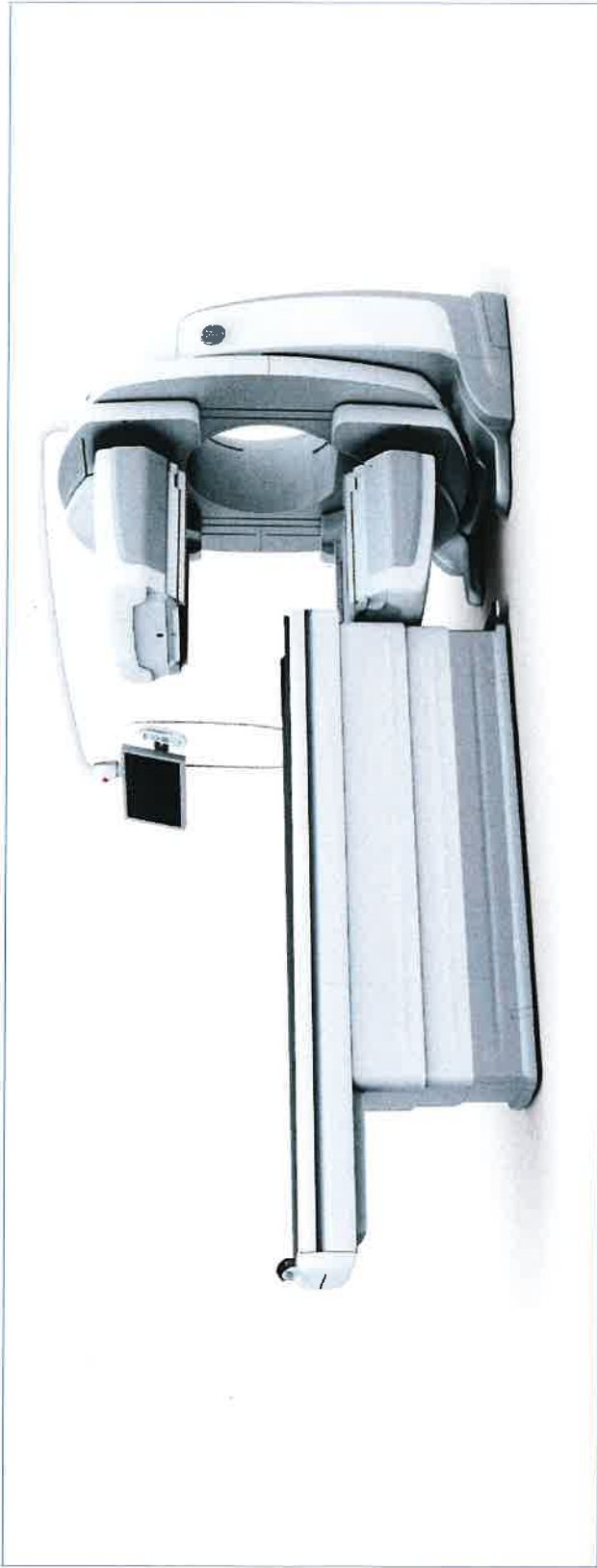
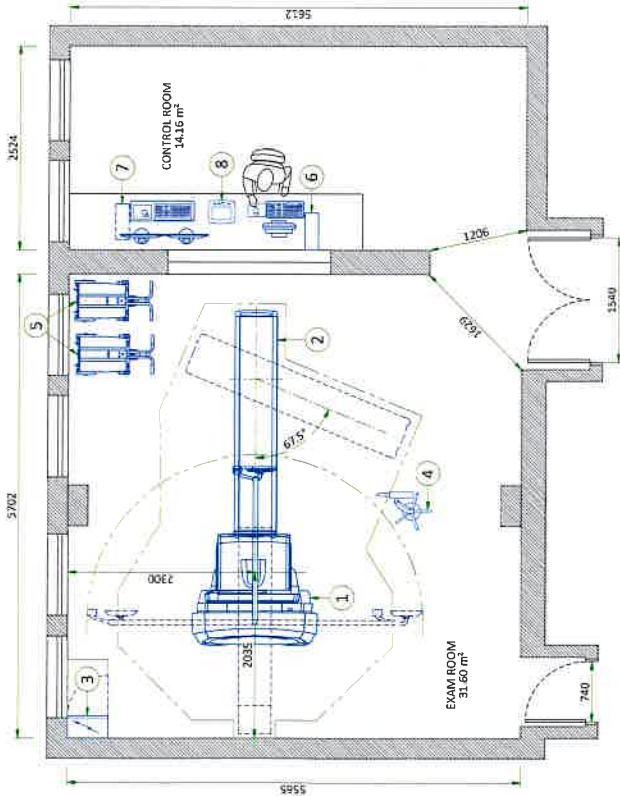


[illegible]

coordonat GNM
Verbeniuc
24.03.22

EQUIPMENT LAYOUT

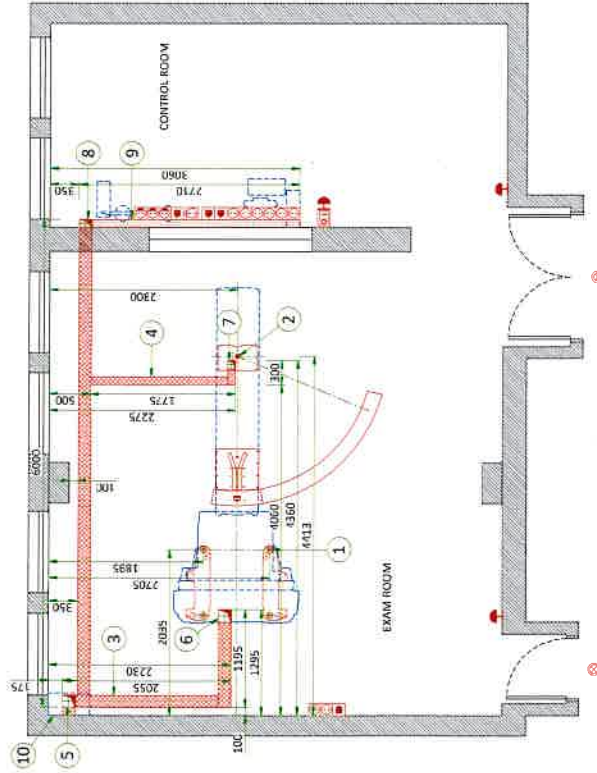
ITEM	DESCRIPTION	DIMENSIONS LxWxH (mm)	WEIGHT (kg)
1	GANTRY (WITHOUT COLLIMATORS)	1530x1360x2110	1928
2	PATIENT TABLE	2800x528x1000	360
3	MAIN DISCONNECT PANEL (MDP)	500x270x700	42
4	INJECTOR ON PEDESTAL		
5	COLLIMATOR CART (WITHOUT COLLIMATORS)	500x570x1458	68
6	NM ACQUISITION STATION	445x169x386	11.3
7	XELERIS 4DR WORKSTATION	440x165x441	10
8	INJECTOR CONTROL		
COLLIMATOR OPTIONS			
HEGP COLLIMATOR (2 PER SYSTEM/CART) - 131 kg			
LEHRS COLLIMATOR (2 PER SYSTEM/CART) - 43 kg [N5 III]			
WALL - ACCORDING TO RECEIVED DRAWING			
EXAM ROOM HEIGHT			
FINISHED FLOOR TO SLAB HEIGHT			3.00 m
FALSE CEILING HEIGHT			2.60 m



Handwritten signature

FLOOR-ELECTRICAL LAYOUT

ITEM	QTY	DESCRIPTION
1		Gantry anchoring (see Structural Details)
2		Table anchoring (see Structural Details)
3		150x70 flush floor duct
4		100x70 flush floor duct
5		150x150 cable inlet on the floor and 150x100 vertical duct for MDP cabling (l=1.1m)
6		150x150 cable inlet on the floor
7		100x100 cable inlet on the floor
8		150x100 cable inlet on the floor
9		150x100 horizontal duct
10		Main Disconnect Panel (MDP)
		Electrical outlet: 10/16A 230V + G
		RI 45 network socket
		System emergency off (SEO), (recommended height 1.50m-1.85m above floor)
		System ON light (L) - 24V
		System remote control (V), locked when power OFF "ON" and "OFF" impulse buttons with indicator lamps red-ON / green-OFF located at 1.50m above floor
		Electrical outlet: 10/16A 230V+G, on uninterruptible power supply (if available)
		Flush floor duct
		Wall duct



[Handwritten signature]

POWER REQUIREMENTS

POWER SUPPLY	SINGLE PHASE - N 173-250 VAC $\pm 10\%$
FREQUENCIES	50/60 Hz ± 3 Hz
MAXIMUM POWER DEMAND	6 KVA
CONTINUOUS (AVERAGE) POWER DEMAND	3 KVA

- Line supply should come into a Main Disconnect Panel (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 material 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 regulation at full load = 6% (including line impedance)
- Transients must be less than 1500 V peak (on a 230 V line). A record of power input disturbances over a continuous one-week period (prior to delivery) enables determination of the frequency and degree of these disturbances and can be used to ascertain the need to provide line conditioning equipment.
- Inrush current can withstand up to 10 times the recommended circuit breaker rating that could be reached during system power up, due to the system main transformer.

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, SE0, L ...) will go to MDP with a pigtail length of 1.5 m, 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

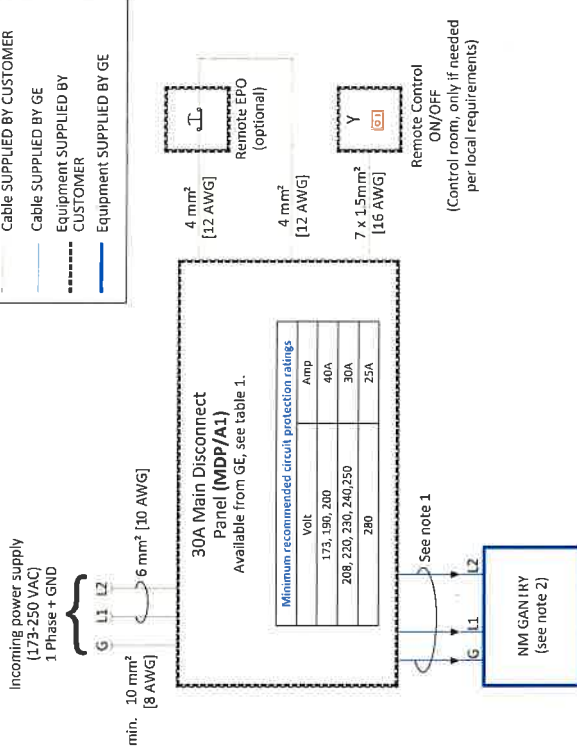
Notes :

- 3 x 10 mm² [8 AWG] cable with a usable length of 10 m [32.8 ft] is delivered with the system. If needed, a 19 m [62.3 ft] cable is available as a spare part.
- GE gantry contains transformer with multiple taps that can accommodate listed voltages.

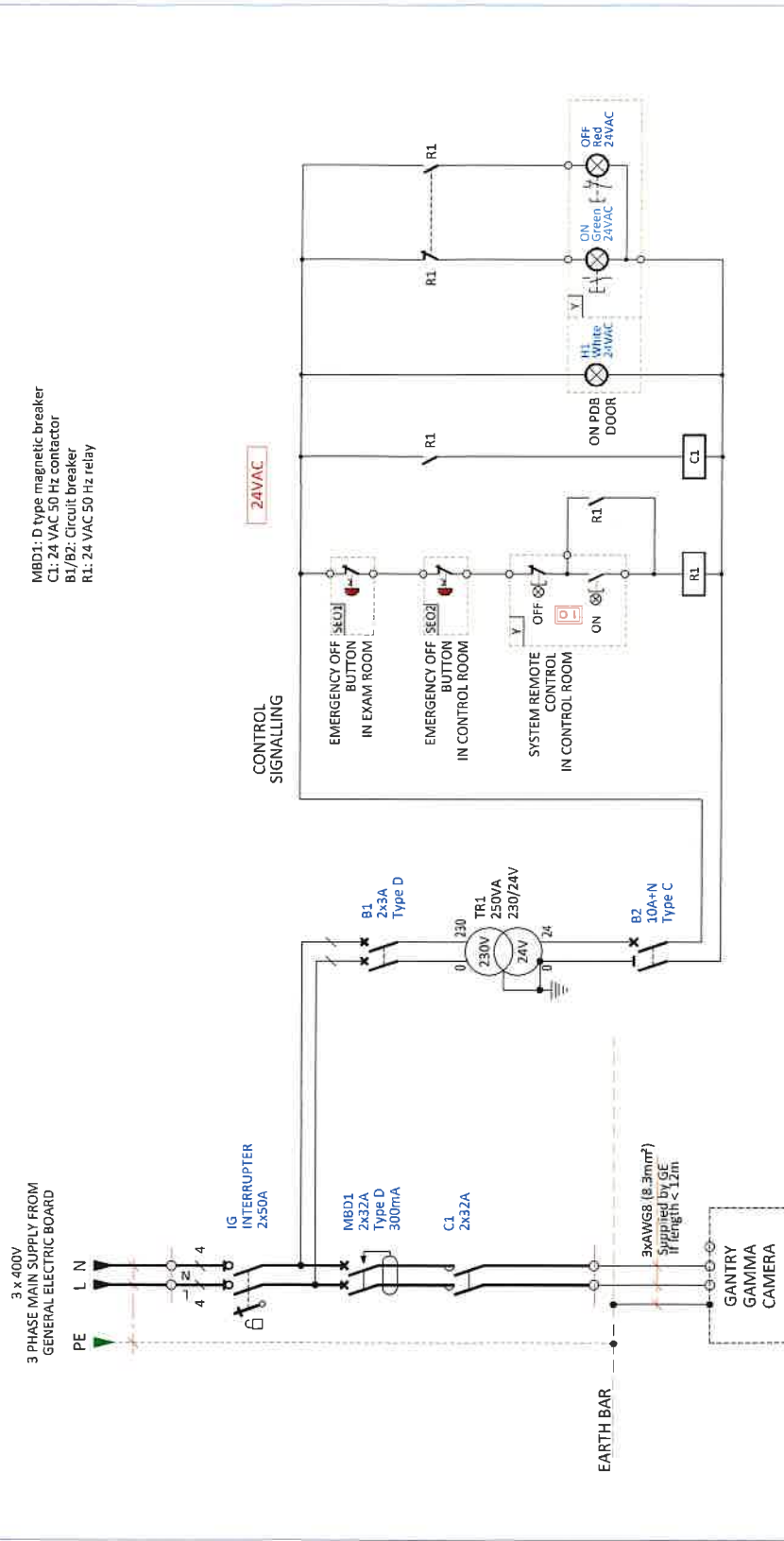
System	Region	Errat
Brivo NM615, Discovery NM630, NM830	EU/EAGM	E45011CR/CL
	USCAN	E45025V (30A)
	LATAM	
Discovery NM630, NM830	UK	E46001TE/PO (Type S-40A)
Brivo NM615	UK	E46001TN-PO (Type 11-40A)

Cable SUPPLIED BY CUSTOMER

- Cable SUPPLIED BY GE
- Equipment SUPPLIED BY CUSTOMER
- Equipment SUPPLIED BY GE



DETAILED SCHEMATICS OF POWER DISTRIBUTION BOX



PDB SCHEMATICS AND DETAILS THAT APPEAR ON THIS PAGE ARE THE PROPERTY OF "GE MEDICAL SYSTEMS FRANCE"

ENVIRONMENT

ALTITUDE

Operating altitude: from -150 m (-492 ft) to 4100 m (13451 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.

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, heliports, elevators, hospital power plants.... etc).
Please refer to the PIM for detailed information.

ACOUSTIC SPECIFICATIONS

It is less than 70 dBA measured at a distance of one meter from the nearest gantry surface, in any direction. It is recommended that the wall and ceiling surface is of a sound dampening material so that the noise is not reverberated and amplified.

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
	LENGTH	WIDTH	HEIGHT	
NM GANTRY WITH DETECTORS MOUNTED	1326 mm [52.2 in]	2213 mm [87.1 in]	2000 mm [78.75 in]	2238 kg [4934 lb]
NM GANTRY WITHOUT THE DETECTORS	952 mm [37.5 in]	2213 mm [87.1 in]	1950 mm [76.7 in]	1690 kg [3726 lb]
TABLE	2809 mm [110.6 in]	900 mm [35.4 in]	1400 mm [55 in]	360 kg [794 lb]

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.

RADIOACTIVE ISOTOPES

USING RADIOACTIVE ISOTOPES

Since the Discovery NM 630 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^{99m}
	Tc^{99m} will be available during installation
	Co^{60} (Rectangular Flood Source)
	Tl^{201}
	I^{131}
Isotopes to be used at site are available for installation	I^{131}
	I^{125}
	Ir^{192}
	Gd^{152}
Note: Specify age and strength	
Xe^{133} (inhalation gas)	

INTERMED SRL

NM 830

NUC-285016-FIN-00.DWG

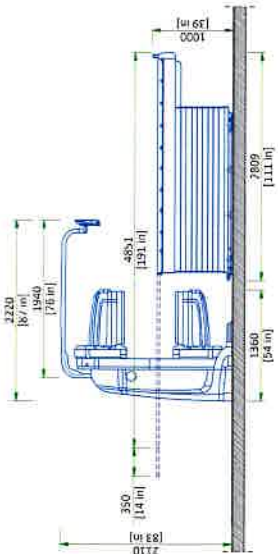
1.50 Rev A Date

Environment - Delivery

07/10

GANTRY AND PATIENT TABLE

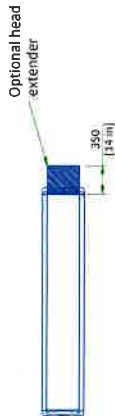
SIDE VIEW



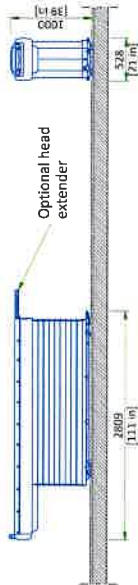
NOT TO SCALE

PATIENT TABLE

TOP VIEW

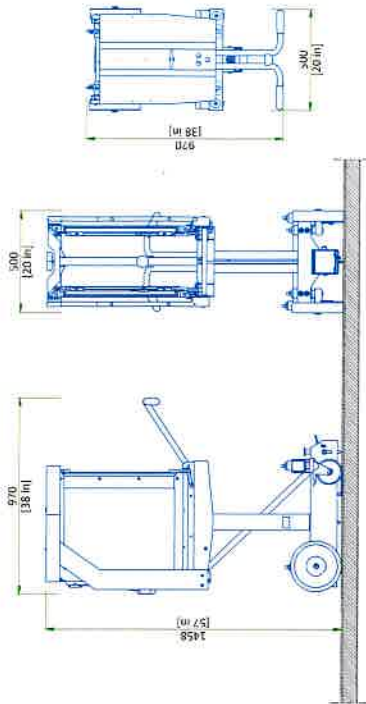


SIDE VIEW



NOT TO SCALE

COLLIMATOR CARTS



TOP VIEW

FRONT VIEW

SIDE VIEW

SCALE 1:20

[Handwritten signature]

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 °F/h]		
RR (1) non condensing	30% to 60%		
Humidity gradient	≤ 5%/h		

STORAGE CONDITIONS

Temperature	44°C [140°F] to +27°C [80°F]
Relative humidity (1)	20% to 60%
Humidity gradient	≤ 5%/h
Air pressure	750 hPa to 1060 hPa
Storage longer than 12 months is not recommended.	

(1) Relative humidity

AIR RENEWAL

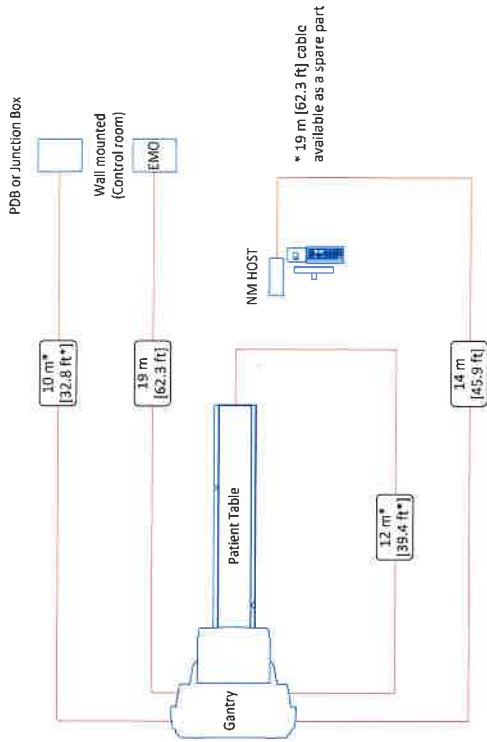
According to local standards.

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	1.32		4500	
	Patient table	0.20		682	
	TOTAL	1.52		5182	
Exam/Control Room	NM acquisition station	0.08		256	
	Xeleris Workstation	0.08		256	
	TOTAL	0.15		512	

INTERCONNECTIONS



GLOBAL SITE READINESS CHECKLIST (DI)

DOC1809666 Rev. 7

GLOBAL SITE READINESS CHECKLIST (DI)

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 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 conformance 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

Site Ready Checks at Installation EH&S Site Requirements Overall access route to the scan room free from obstruction / high hazards. Enough space to store coats, equipment, parts, install waste and the general area free from obstruction and trip hazards. Enough necessary facilities for the GE employees available. No 3rd parties working in the area that may affect the safety of the installation activity. Area free from any chemical, gas, dust, welding fume exposure and fire painting being completed and dry. All emergency routes identified, signed and clear from obstruction. Accessible single source lockable pond that LOTO can be applied to for GE equipment installation (MDP and/or PDU). There are no other conditions or hazards that you have observed or have been made aware of by the customer or contractors on site.	
	Required for Mechanical/Install start Room dimensions, including ceiling height, for all beam, Equipment/Technical & Control rooms meets GE specifications. Calling supervisor, if indicated on the GE drawing, is in the correct location and at the correct height according to the Original Equipment Manufacturer specifications. Levelness and spacing has been measured, and is ready for the installation of any GE supplied components. Overhead support structure (unistrut) has been confirmed with customer/contractor to meet required GE provided criteria. Finished ceiling is installed. If applicable ceiling tiles installed per PMI discretion. Floor levelness/flatness is measured and within tolerances, and there are no visible defects per GEHC specifications. Entry door threshold meets PMI requirement Floor Strength and thickness have been discussed with customer/contractor and they have confirmed GE requirements are met. Rooms that will contain equipment, including staging areas, if applicable, are constructed debris free. Precautions must be taken to prevent debris from entering rooms containing equipment. Floor mats (floor/wall/ceiling/Access Flooring) are available for installation of GE cables are of correct length and diameter. Cable ways (floor per GE Final drawings and cable access openings areas installed at a time determined by GEHC PMI. Surface floor duct) can be installed at time of system installation. Adequate room illumination installed and working. Customer supplied countersinks where GE equipment will be installed are in place. Nuclear Medicine systems levelness measurement survey must be provided to GE prior the delivery
	Required for Calibration start PMVC systems installed, and the alter limits, minimum environmental operational system requirements. System power & grounding (PDB/MDP) is available as per GE specifications. System power & grounding (PDB/MDP) is installed at point of final connection and ready to use. Lock Out Tag Out is available. PMI to confirm all feeder wires and breaker are size appropriately. CPO installed if needed. PMI to confirm with electrical all power and signal cables are well terminated ensuring there are no loose connections. Network outlets installed. Computer network available and working. Site has license for using/importing radioactive sources and a Hot Lab is available. Radioactive Sources should be available for system calibration during installation. Lead doors and windows complete or scheduled to be installed. If applicable, radiation protection (shielding) finished & radioprotection regulatory approval for installation obtained.

Note: The details shown here are only an extract from DOC1809666. For the complete document please contact your PMU.

100