



HORIZON Technical Specification



Confidential

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1 Introduction

HORIZON diagnostic x-ray system is designed with simply configuration for convenience and user- friendly in a general radiographic procedure.

It features a high frequency x-ray generator and high quality x-ray output, giving you a high definition images.

2 Feature

To minimize problems and make your tasks easier, always begin with a new, blank version of the current template, even if you are updating a document that uses this template to a newer version.

- Great Expandability / Upgrade

It can be set up, such as CR, film, wireless and even fixed, depending on users' demand, further leading to easy entry into digital radiography.

High quality digital images at an affordable cost 17"x17" cassette-sized or any customized, wired & wireless detector Long battery life and speedy data transmission in gigabits.

- Convenient

Powerful rotating anode x-ray to pivot 240 degree which allows exposures from various angles Anatomical programmed Radiography(APR) for optimized image quality at low dose Intuitive and user-friendly control console Self-diagnostic circuit and error codes display One touch buttons for fast positioning and exposure.

- High Performance

Superb image quality with high frequency x-ray generator DR Ready - integration ideal for both conventional and digital applications Specialized mounting hardware for different digital panels is available upon request DICOM / PACS connectivity as well as the independent image archiving.

3 System Configuration

Unit	Remarks
Standard Configuration	
HORIZON	High Frequency Generator - PXR-401B, PXR-401BB, PXR-501B, PXR-501T, PXR-501TA Operating Console X-ray Tube: E7239X, E7252X Collimator: M-38 LED Floor-mounted Tube Stand: XTS-1 Floor-ceiling Mounted Tube Stand: XTS-2 4-way Floating Table: XBT-1 Wall Bucky Stand: XWB-1 X-ray Grid
Option	
AEC (Auto Exposure Control) Overhead Patient Hand Grip Apron 0.5 pb	SSMC 601

4 Specification

The specification of components such as generator, tube, collimator, tube stand, table, wall bucky stand, AEC ion chamber are shown below:

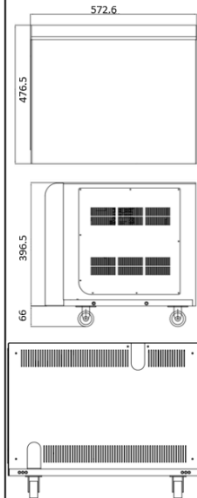
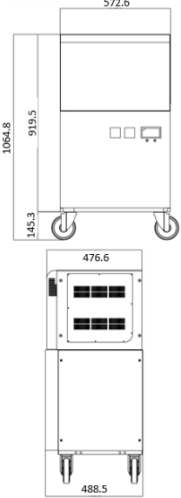
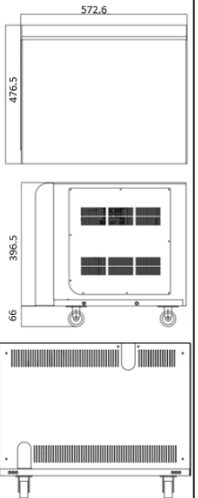

Generator					
Model	PXR-401B	PXR-401BB	PXR-501B	PXR-501T	PXR-501TA
Generator Type	High Frequency Output 40 KHz				
Line Nominal, Phase	220/230/240 VAC 1Ø	100-120/220-240 VAC 1Ø	220/230/240 VAC 1Ø	380/400/440 VAC 3Ø	220/230/240 VAC 3Ø
Power consumption	75 kVA	3 kVA	90 kVA	55 kVA	55 kVA
Line Frequency	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz
Output power	40 kW	40 kW	50 kW	50 kW	50 kW
kV Range	40 - 125 kV (1 kV step)		40 - 150 kV (1 kV step)		
kV Accuracy	± 5 % kV				
mA Range	10 - 500 mA		10 - 630 mA		
mA Accuracy	± 5 % mA				
Time	4 msec - 10 sec				
Time Accuracy	± (10%+1) msec.				
Number of APR	1296				
mAs	0.4 - 630 mAs				
mAs Accuracy	± (10%+0.1) mAs				

Tube		
Model	E7239X	E7252X
Focal Spot value	1.0/2.0 mm	0.6/1.2 mm
Operating voltage	40 - 125 kV (1 kV step)	40 - 150 kV (1 kV step)
Target Angle	16°	12°
Permanent Filtration	0.9 mm Al/75 kV	
Anode Heat Content	140 KHU (100 kJ)	300 KHU (210 kJ)
Cooling Method	Natural / Forced Air	
Operating Temp.	10 ~ 40 °C	
Collimator		
Model	M-38 LED	
Type	Manual	
Power input	24 VAC	
Lamp Time	Automatic illumination With timer for lamp (30 sec) / configurable timer	
Max. Window	47 x 47 cm (SID 100 cm)	
Min. Window	5 x 5 cm (SID 100 cm)	
Tube Stand		
Model	XTS-1	
Type	Floor Mounted Tube Stand	
Longitudinal Travel	1,460 mm (± 10 %)	
Vertical Travel	1400 mm (± 10 %) (450~1,850 mm from floor to focus)	
Transverse (Arm Travel)	220 mm (± 10 %)	
X-ray Tube rotation	±120°	
Column rotation	±180°	
Lock(Brake)	Electromagnetic brakes	

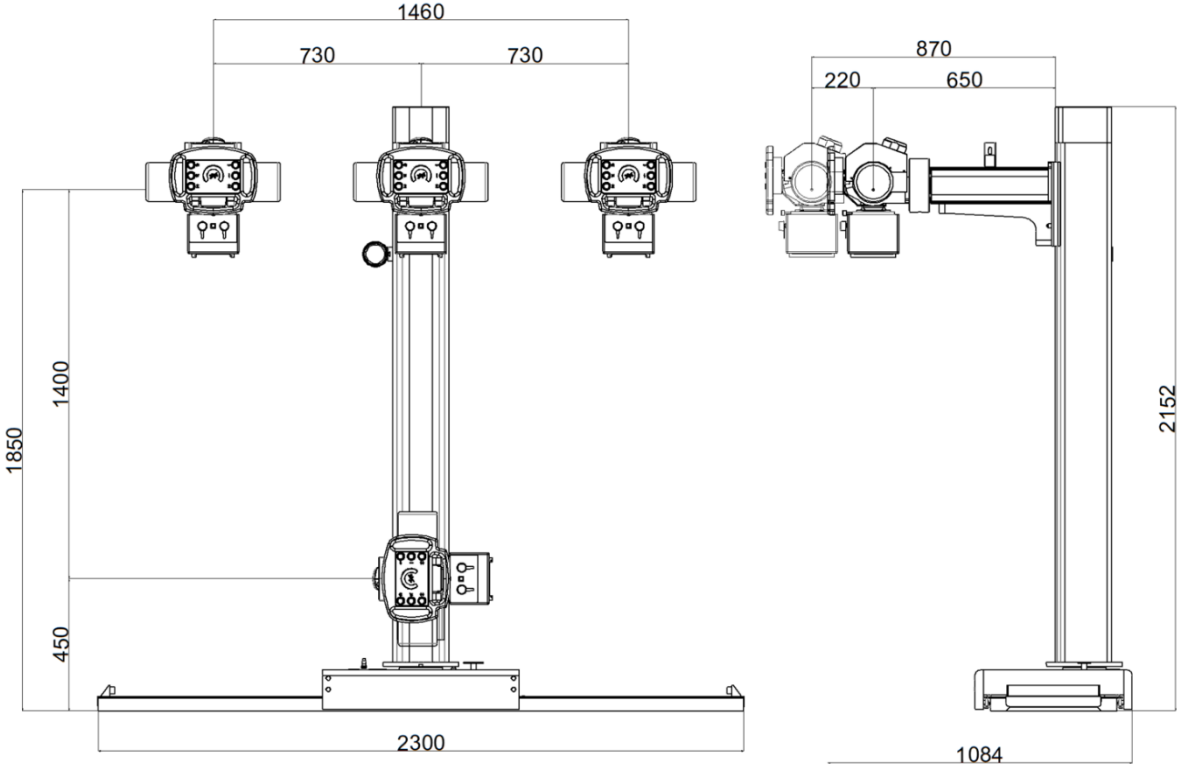
Table	
Model	XBT-1
Lock Operating System	Operated by Foot Switch
Table Base	1,270 mm x 570 mm
Table Top	2,000 mm x 800 mm (± 10 %)
Table Top Height	650 mm (± 10 %)
Longitudinal Travel	670 mm (± 335 mm)
Transverse (Lateral)	210 mm (± 105 mm)
Bucky Travel	522 mm (± 10 %)
Maximum Patient Load Weight	200 kg
Grid	10:1 Ratio, 103 line/inch
Wall Bucky Stand	
Model	XWB-1
Vertical Movement	1,400 mm±10 % (380~1780 mm from floor to Bucky center)
Grid	10:1 Ratio, 103 line/inch
Lock (Brake)	Electromagnetic brakes
AEC ION CHAMBER	
Model	SSMC 601
Accessories	
Model	Over Head Patient Grip
	Apron 0.5 pb

5 Outline Drawings

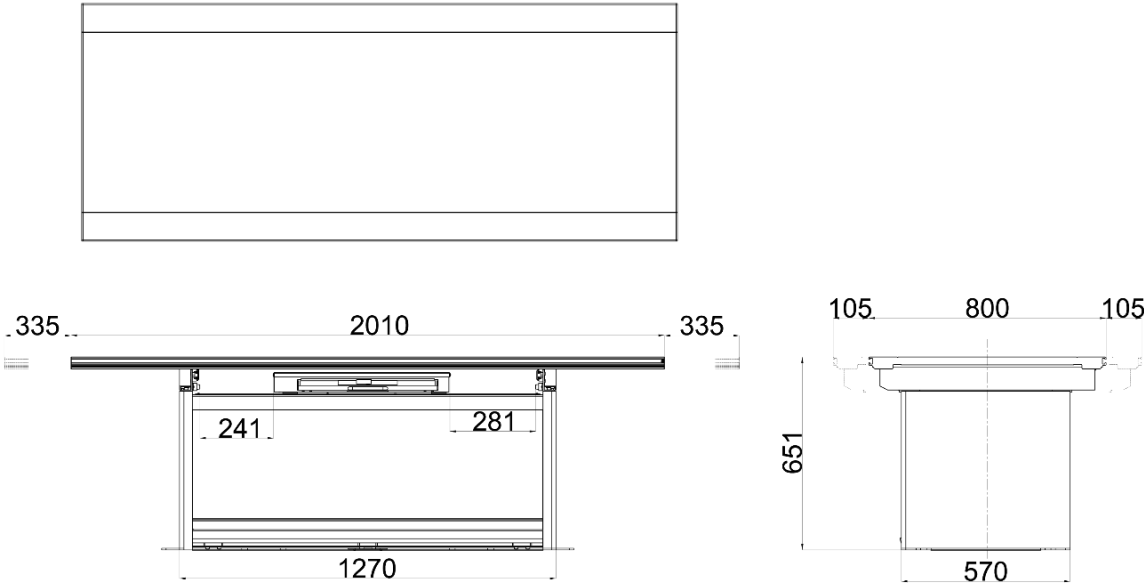
The outline drawings are shown below.

Product Name	PXR-401B (40kW)	PXR-401BB (40kW)	PXR-501B (50kW)	PXR-501T (50kW) / PXR-501TA (50kW)
Generator				

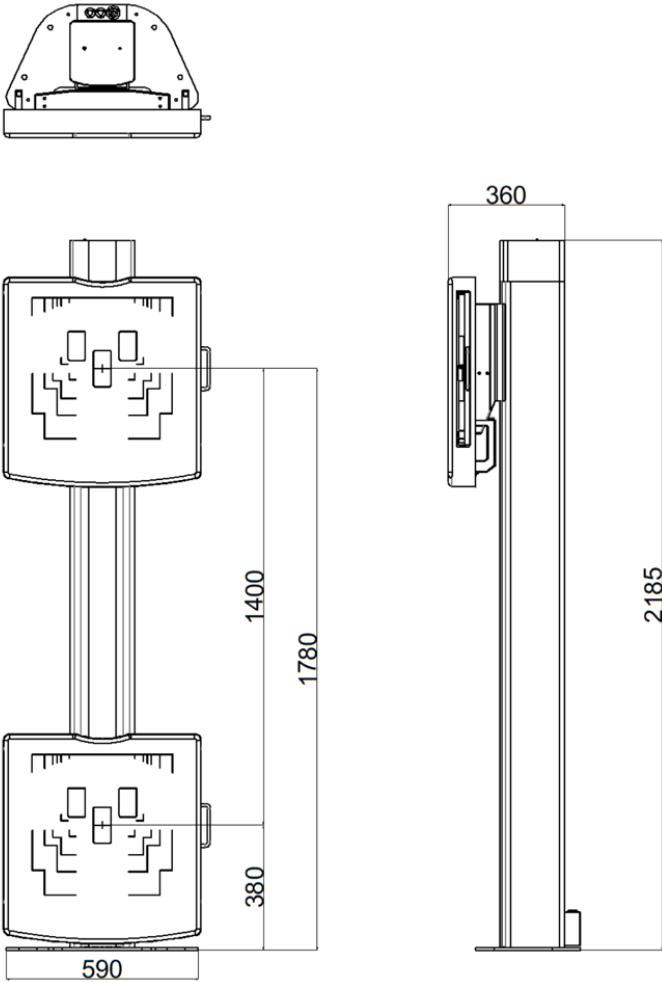
Floor Mounted Type



4-way Table



Wall Bucky



Publication History

Version	Date	Changes
A	2023-02-06	Initial release
B	2023-04-14	Updated the life frequency of PXR-501TA from 60 Hz to 50/60 Hz, and updated the measurement unit from V (ac) to VAC in Chapter 4. Updated the product name to be HORIZON instead of CARESTREAM HORIZON. Corrected manufacturer information. Added kV/mA/Time/mAs accuracy into generator technical specification table on Page 4-1.
C	2023-05-11	Revised 'PXR, 501T' to be 'PXR-501T' on Page 3-1. Revised the PXR-401BB line nominal information on Page 4-1.



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