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## **PMB4S Premium**

TECHNICAL SPECIFICATIONS

**PMB4S PREMIUM TILTING WALL BUCKY**

**For auto-positioning configurations**



## PMB4S PREMIUM TILTING WALL BUCKY

It consists in two main parts:

- The column assembly
- The image receptor support



It is a wall bucky stand providing full flexibility for radiographic examinations. This stand is suitable for all varieties of examinations and allows radiographies in horizontal and vertical positions and a variety of radiographs of patient standing, recumbent, sitting on a wheelchair or on a stretcher.

This equipment offers even greater versatility with a tilting bucky, controlled with electromagnetic brakes, for angulation examinations.

### **X** Column assembly



It is composed with the following elements:

The **column stand**, fixed to the floor, is the main part of the column assembly, as it is the support for all the elements.

It contains the main cabling, the electronic devices and the Carbon steel **counterweights** that counterbalance the receptor assembly to enable a soft vertical movement.



The **carriage arm** moves vertically along the guide on the column. It is motorised.

With a square Flat Panel Detector, the centre of image receptor is 28 cm far from the floor.

With a 14"x17" FPD, The centre of image receptor is 34 cm far from the floor.

In any case, the maximum distance between the centre of image receptor is 190 cm far from the floor. The carriage arm remains locked in its vertical position when the equipment is switched ON, thanks to the electromagnetic vertical brakes. As well, the vertical movement is locked when the equipment is turned OFF.

Press the key on the vertical lock handle or the footswitch to release the brake and displace smoothly up and down the image receptor support.

By the pedal, the vertical movement starts to move slowly and after few seconds the speed increases.

The control box contains autopositioning and autotracking buttons, tilting and one emergency stop.



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**X Image receptor support**

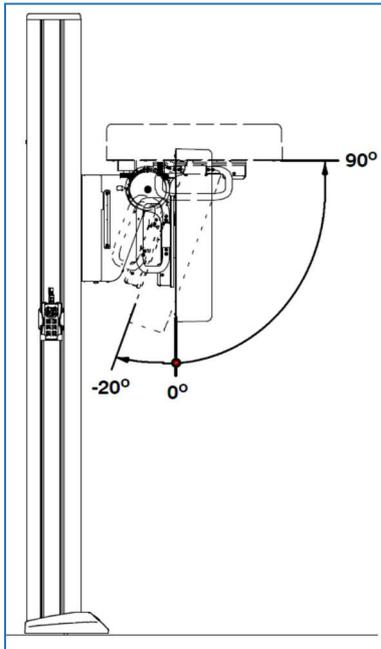
X-ray image receptors are digital detector (specify when ordering).

Insertion of the portable image receptor on the left (on the right upon request). Only left insertion of grid for integrated detector.

Bucky cover / image receptor distance 37 mm

Bucky cover / image receptor distance 33 mm with integrated FPD

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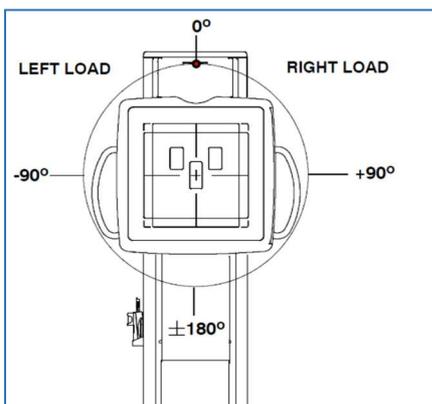


The Bucky can be angled in a range that varies **from -20° to 90°**, so it can be placed horizontally. The movement is manual and electrically controlled. The electromechanical brake and the mechanical detents, or 0-90 ° tilting locks, located on the tilting carriage, lock the Bucky position.

DR digital versions:

Designed for detector sizes: 35 x 43 cm wifi, up to 43 x 43 cm wifi or integrated

Fixed or removable carbon grid, focus at 150 cm, R10/1 (other values on request))



The optional Bucky rotation functionality allows to get the receptor rotated (up to 180°) around the centre of image. The movement is mechanical and manual. It is often used with the optional image receiver support extension for exposures on mobile table.



### **X Autotracking with SP4S Premium**

The Auto-tracking functionality allows, once the X-ray tube and the image receptor of the Wall Stand are already aligned, that when one of them initiates the vertical movement, the other one tracks it. Always the Source Image Distance is kept constant. The equipment that initiates the motion is the Master and the tracker equipment is the Slave. The suspension, the table, and the wall bucky can be « Master » or « Slave ».

### **X High frequency generator**

The generator is made of an electronic cabinet including HV tank. It is microprocessor controlled and uses the Inverter technology with IGBT circuits (Insulated Gate Bipolar Transistor).

*Available powers are 32kW, 40kW, 50kW, 65kW or 80kW*

### **X AEC (option)**

Installed in the image receptor tray, the ionization chamber is an x-ray sensor designed for automatic exposure control regarding selected kV in One point mode. It will optimize image quality with patient dose reduction.

It is composed with three rectangular fields and the central one is slightly lower positioned

### **X X-ray Tube**

*Several types and brands of X-ray tubes are available.*

- Presetting of x-ray tube features in generator:

Loading ratings, cooling ratings, starting voltages, starting times, maximum current limitation

- Safety and protection disposals for x-ray tube:

The electronic calculation of load by generator software indicates limits to the tube with message and forbids x-ray

Housing temperature control and display of available Heat Units in %

Overheated IGBTs detection

Housing oil pressure control in series with x-ray tube heat safety

### **X Dose Area Product measuring system**

It consists in a transparent ionization chamber and its integrated detector electronics, installed at the level of the collimator. A dedicated zone closed to the console displays Dose Area Product

### **X DR digital system with flat panel detector**

With its acquisition console and Flat panel detector that can be portable wifi, or wired integrated into the Bucky, it replaces the analog system to optimise patient workflow and user comfort. Captured image is readable within few seconds.

### **X Options**

1.1.48 AEC (Automatic Exposure Control)

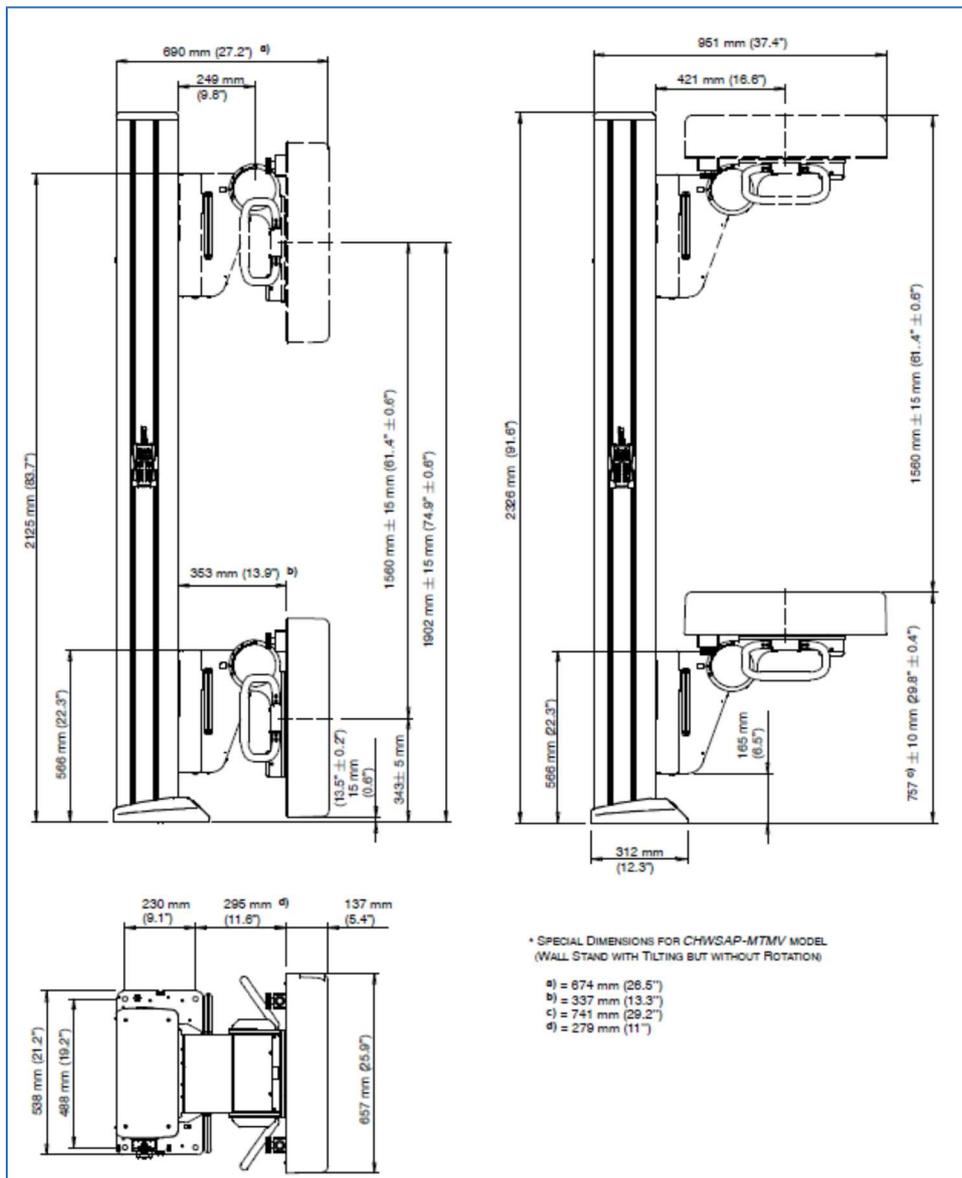
1.1.49 Patient handles, arm support

*Other options on request*

**X Equipment environment**

**Dimensions (l x w x h) and weight (without image receptor and with its support)**

Bucky in vertical position 66 x 69 x 233 cm, 270 kg ; Bucky in horizontal position 66 x 95 x 233 cm



**Operating environmental conditions**

Temperature from 10°C to 40°C (the temperature has to change progressively)

Relative humidity from 20% to 85% (not condensing)

Atmospheric pressure from 650 to 1060 HPa

*These environmental conditions do not include other items such as digital detector.*

*Refer to the other items documents*