TPF5S Premium

TECHNICAL SPECIFICATIONS

TPF5S PREMIUM ELEVATING TABLE

for auto-positioning configuration

STEPHANIX
MEDICAL IMAGING SOLUTIONS

## TPF5S PREMIUM ELEVATING TABLE

It consists in three main parts:

- The tabletop
- The table base

The image receptor support

This elevating table is particularly well suited for environments with a large number of trauma, geriatric, paediatric and orthopaedic cases, designed for general radiography in hospitals, clinics and medical practices to provide X-ray radiographic images of the skeleton, skull, chest, abdomen, extremities and other body parts.

Images can be obtained with the patient in sitting or lying position, physically abled, disabled, immobilized or shocked.

X Tabletop
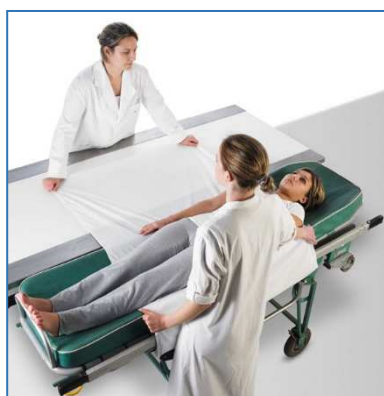
1.1.43

The flat four way floating *tabletop,* 2**44** x 87 cm (2**30** x 62 cm radiolucent) with rails for accessories, has a large width, is composed in standard with laminated structure, with low absorption 1.2 mm Al eq. The optional Carbon tabletop with low absorption 0.6 mm Al eq. The tabletop supports an evenly distributed maximum load of 350 kg. Optionally, it can support 400kg.

The maximum load allowed at the end of the tabletop in cantilever position is 100 kg.

Manual lateral movement, +/- 15 cm

Manual longitudinal movement, + 60 /- 60 cm

Control pedals permit to lower and raise the table and to control the tabletop movements by releasing electromagnetic brakes.
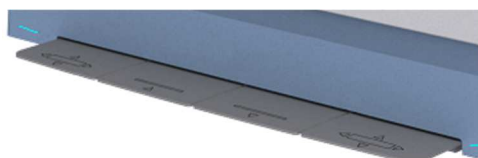
It is necessary to step twice the control pedal to release the brake for safety reasons to avoid occasional brakes release. It is configurable during the installation for a unique step to release the brake.

X Table base

The table base is equipped with telescopic covers set for elevation

It has been designed to provide patient comfortable access; this variable height allows to be easily adapted and to facilitate the patient movement from a bed, stretcher or wheelchair.

1.1.39 Motorised variable height at 4 cm /s, from 50 to 90 cm, controlled by footswitch

Safety system for variable height:
Under the tabletop, a safety system stops down pedal movement when travel finds an obstacle.

X Image receptor support

X-ray image receptors are digital detectors.

Manual longitudinal movement of 61 cm

Electromagnetic brakes released by a switch. It is motorised for Auto Positioning configurations

Total patient coverage under X-ray all over the tabletop (including tabletop movements)

DR digital versions:

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

Smaller FPDs can be used

Fixed or removable carbon grid, focus at 100 cm, R10/1 (other values on request)

X Auto-tracking with SP4S Premium

The Auto-tracking functionality allows, once the X-ray tube and the image receptor are already aligned, that when one of them initiates the movement, the other one tracks it. Always the relative distance and the SID are 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

AEC (Automatic Exposure Control)
Pair of Patient handles
Compression belt
Other options on request

X Equipment environment

Dimensions (L x w x h) and weight

240 x 87 x 50 cm minimum, 290 kg

Operating environmental conditions

Temperature from 10°C to 35°C (the temperature has to change progressively)

Relative humidity from 30% to 75% (not condensing)

Atmospheric pressure from 700 to 1060 HPa

These environmental conditions do not include other items such as digital detector. Refer to the other items documents

Power supply

120 - 230 V ca +/- 10%, single phase, 50 - 60 Hz

Protection

2x16 A circuit breaker, B or C or D power line, with 30 mA differential sensitivity

Electro Magnetic Compatibility complies with IEC 60601-2 standard

Maximum power consumption 500 VA

Maximum thermal output: negligible