



SPINE 3D MAT+

TECHNICAL SPECIFICATIONS



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Posture monitoring with 3d technology

Spine3D allows a non-invasive scan of the of the back and lower limbs thanks to LiDar (Light Detection and Ranging) technology. Non-invasive and radiation-free, it allows repeated analyses to be carried out on the same subject, without any contraindications.

Thanks to the use of infrared rays, it can acquire three-dimensional images of the body morphology in any external light condition.

For immediate feedback, it also allows the import and superposition of X-rays and images. Spine3D is able to scan the patient's spine even in the absence of markers, always providing a faithful reproduction of the subject's posture.

The device offers various clinical parameters, for posture analysis, scoliosis analysis and all possible spinal deformations (lateral, frontal and sagittal), global rotation of the spine and pelvic tilt.

The analysis will be performed by placing the patient 110 cm from the cameras, a position facilitated by the positioner provided.

The acquisition of the patient's back will be very rapid and the patient must remain in a natural position with the arms relaxed along the sides. The back must be bare and the intergluteal fold visible.

Spine 3D™ MAT+ Technical features

DIMENSIONS

- Maximum overall dimensions: 165x83x237 cm
- Weight: 90 Kg

ELECTRICAL DATA

- Power supply: 100-240 V, 50/60 Hz
- Current consumption: 300 mA (standby mode); 700 mA (during acquisition)
- Maximum power consumption: 170 W

TECHNICAL FEATURES

- Aluminum frame
- Monitor Touch screen 27" full HD
- Resolution: 1080x1920, Format: 9:16
- ToF Depth RGB Camera
Resolution: 1600x1200 pixels,
Frame rate: 15 fps, Field of view: V-70° H-50°
- Depth Camera
Resolution: 640x480 pixels,
Frame rate: 15 fps, Field of view: V-60° h-45°
- Scanner 3D LiDAR
- Depth technology: Time-of-Flight (ToF)
- Operating range of measurements: from 0,15 to 5 m
- Interface: Gigabit Ethernet and RS485

Pressure platform feature:
10000 sensors/m², 24k gold-coated sensors with conductive rubber; up to 400 hz

SOFTWARE

The main data that the software offers are:

- Length, inclination, and imbalance of the spine in the coronal, sagittal, and transverse planes
- Vertebral deviation and surface rotation
- Cervical and lumbar arrow
- Kyphotic and lordotic angle
- Inclination and rotation of the shoulders and pelvis
- Angle of flexion of the knee in the sagittal and coronal planes
- Distances between hip, knee and ankle joint centers

Pressure plate software integration:

- Maximum and average pressure values of the rearfoot and forefoot
- Load and surface distribution pie chart
- Center of pressure and symmetry index



Company whit Management System
Quality Certificate N° 50 100 16690



CERTIFICATION

CE FDA MD NMPA