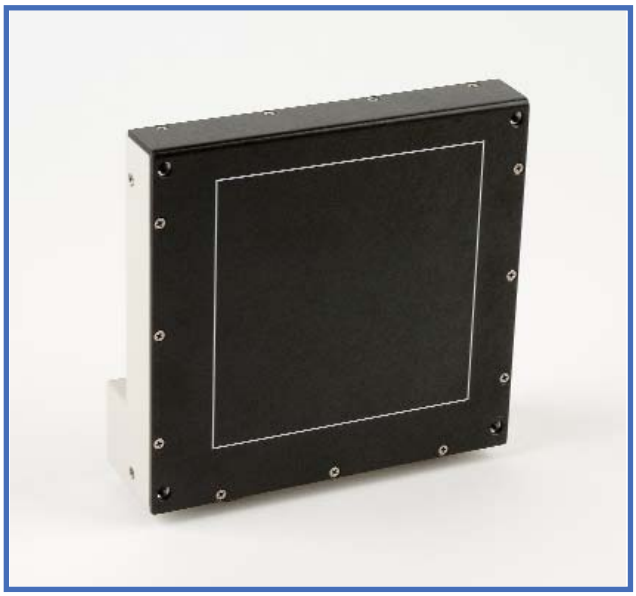
VARIAN medical systems

X-RAY PRODUCTS

PaxScan®1313
Amorphous Silicon Digital X-Ray Imager



The PaxScan® 1313 is the latest development from Varian Medical Systems. This new product incorporates all of our latest high speed electronics used in our real-time imagers, but in a smaller format suitable for applications currently using 6 inch Image Intensifiers. Interfacing to this new panel is a simple task through the industry standard CameraLink port.

The high resolution receptor combined with a software-based command processor capable of 30 frames per second makes this an ideal imager for microfocus X-ray applications. Computer tomography (CT) applications also benefit from the high dynamic range and uniform image quality across a wide X-ray dose range.

Technical Specifications

Receptor Type ..... Amorphous Silicon

Conversion Screen ..... Detached CsI, DRZ Plus, or Gd_2O_2S: Tb (Kodak Lanex Screen)

Pixel Area Total ..... 13.0 x 13.0 cm (5.12 x 5.12 in.)

Pixel Matrix Total ..... 1,024 x 1,024 (1 x 1)
512 x 512 (2 x 2)

Pixel Pitch ..... 127 μm^2

Limiting Resolution ..... 3.94 lp/mm

MTF, X-Ray ..... >48% @ 1 lp/mm (1 x 1), CsI screen

Energy Range ..... 40 - 160 kVp

Fill Factor 85%

Image Capture (optional) ..... Epix CameraLink (PCI) (available with 1, 3, 5, 10m cable)

Scan Method ..... Progressive

A/D Conversion 14-bits

Frame Rate (Workstation dependent) ..... 10 fps (1 x 1)
30 fps (2 x 2)

Data Output ..... CameraLink

Exposure Control ..... Serial port to host computer

Power

Power Dissipation ..... 15 watts (max.)

Power Supply/Mains ..... 100 - 240 VAC, 47 - 63 Hz

Software

The software release includes ViVA™, a basic application for image acquisition and viewing on an end-user workstation running Microsoft® Windows™. The developer's software package includes a "Virtual Command Processor" software interface that performs detector calibration, detector set-up, image acquisition, and image corrections. ViVA™ includes file type translators for .viv, .raw, .jpg, and .bmp file formats. Windows® XP compatible.

Environmental

Temperature Range - Operating ..... 10°C to 35°C (max.)
(Ambient) - Storage ..... -20°C to +70°C

Humidity - Operating (non-condensing) ..... 10 to 90%
Storage (non-condensing) ..... 10 to 90%

Regulatory

U.S. ..... UL 60601-1
Canada ..... CSA 22.2 No. 601.1-M90

Mechanical

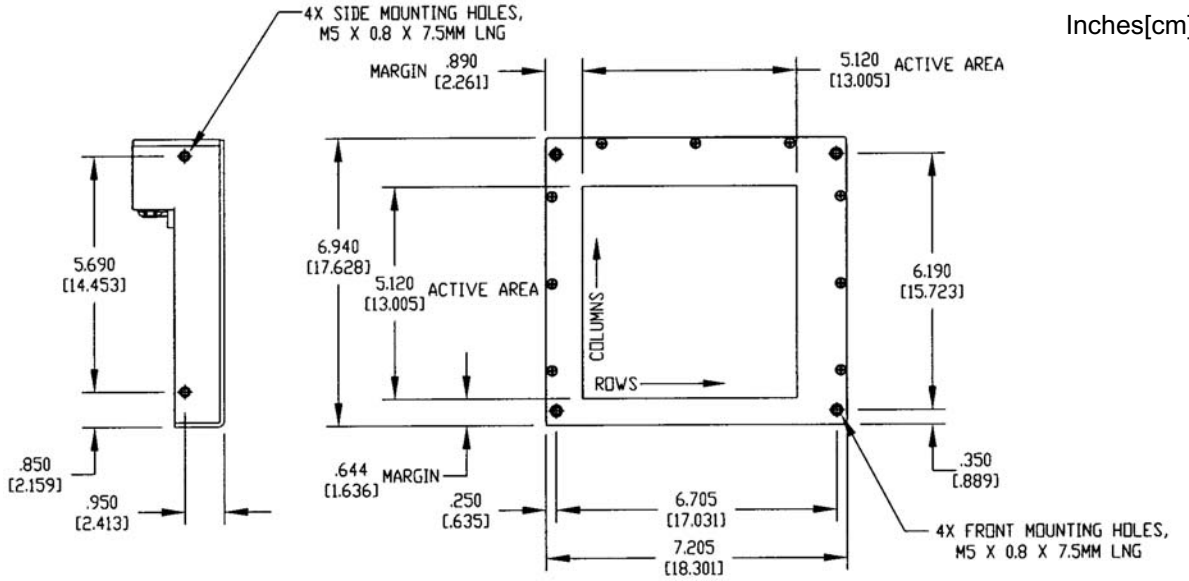
Size ..... 7.205 (w) x 6.940 (h) x 2.200 (d) inch
[18.301 (w) x 17.628 (h) x 5.588 (d) cm]

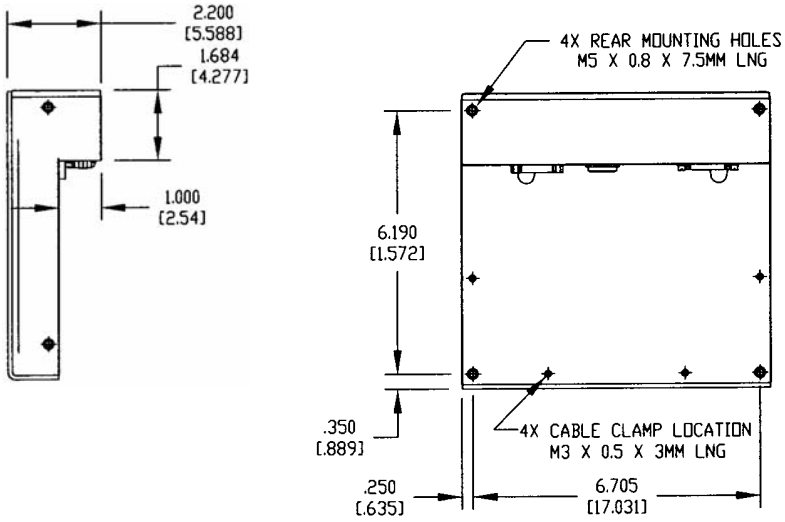
Weight ..... 3.70 lbs. (1.68 kg)

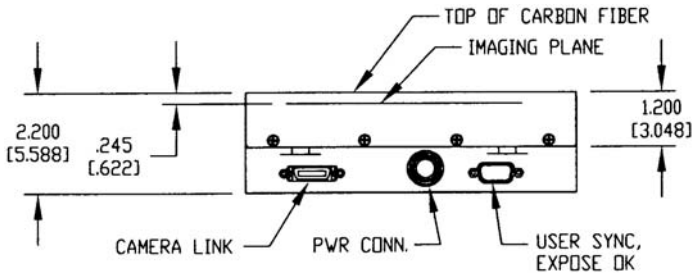
Housing Material ..... Aluminum

Sensor Protection Material
Carbon fiber plate (2.5 mm thick) and aluminum

Inches[cm]







NOTE: As with all Varian Amorphous Silicon Image Receptors, the PaxScan 1313 is designed to be integrated into a complete X-ray system by a qualified system integrator. The system integrator is responsible for obtaining FDA clearance for medical use.

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