

# MSLFP33

## Portable X Ray Detector



## MSLFP33 X Ray Detector

MSLFP33 production is a portable type and low noise x ray flat panel detector based on amorphous silicon technology. A-Si technology based detector owns many advantages that are unavailable with other technology, MSLFP33 production takes a high image quality and a large dynamic range, also MSLFP33 possesses multi-gain stage, this function makes it possible that the detector can both be suitable for high sensitivity and large dynamic range requirements. Based on above characteristics, MSLFP33 detector can be widely used in medical, industrial veterinary, and research application area.

Key features for amorphous silicon technology:

- ◆ Large dose dynamic range
- ◆ Long life time

### Key Features

- Pixel Pitch: 140  $\mu$ m
- Pixel Matrix: 3072X3072
- ADC: 16-bit
- Gain Stage: Multi-Gain
- Scintillator: GOS/CSI
- Water Proof: IPX0
- Interface: Quick self-locking connector
- Calibration: Software, Firmware
- Radiation Hardness:  $\geq 10000$ Gy

### Application

- Medical
- Industry
- Veterinary
- Research

Technology	
Sensor	A-Si
Scintillator	GOS / CSI
Active Area	430 x 430 mm
Pixel Matrix	3072X3072
Pixel Pitch	140 $\mu$ m
AD Conversion	16 bits
Interface	
Communication Interface	Gigabit Ethernet
Exposure Control	Trigger In(Edge or Level) / Trigger Out (Edge or Level)
Image Acquisition Time	$\leq 1$ seconds
Operating System	Windows7 / Windows10 OS 32 bit or 64 bit
Technical Performance	
Resolution	3.5 lp/mm
Energy Range	40~160 KV
Lag	<1% 1st frame
Dynamic Range	$\geq 86$ dB
Sensitivity	540 lsb/uGy
SNR	48dB @(20000lsb)
MTF	70% @(1 lp/mm) 38% @(2 lp/mm) 21% @(3 lp/mm)
DQE	58% @(0 lp/mm) 41% @(1 lp/mm) 25% @(2 lp/mm)
Mechanical	
Dimension(H x W x D)	460 x 460 x 15 mm
Weight	4.6 Kg
Sensor Protection Material	Carbon Fiber
Housing Material	High Strength Aluminum Alloy
Environmental	
Temperature Range	10~35°C (operating); -10~50°C (storage)
Humidity	30~70% RH (non-condensing)
Vibration	IEC/EN 60721-3 class 2M3 (10~150 Hz, 0.5 g)
Shock	IEC/EN 60721-3 class 2M3 (11 ms, 2 g)
Dust and Water Resistant	IPX0
Power	
Supply	100~240 VAC
Frequency	50/60 Hz
Consumption	14 W

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