

# Whale3030FPI-H

a-Si X-ray flat panel detector



## Key Features

- 18 fps frame rate, high positioning accuracy
- Dynamic imaging
- Ingress Protection rating of IP65
- 16MV high-energy protection design
- Direct evaporation coupled Cesium Iodide (CsI) Scintillator effectively reduces light scattering between pixels

**Whale3030FPI-H** is a 28.6 x 28.6 cm fixed type, amorphous silicon, dynamic flat panel detector. It features excellent sensitivity and high dynamic range modes, the structural epitaxial radiation shield design offers user flexibility, and external protection. The 16MV high-energy is an optimal solution in industrial high-energy non-destructive testing (NDT) applications.

## Applications



# Technical Specifications

Technology	
Sensor	A-Si
Scintillator	CSI / GOS
Active Area	286 x 286 mm
Pixel Matrix	2048 x 2048
Pixel Pitch	140 μm
AD Conversion	16 bits
Interface	
Data Interface	Optical Fiber
Exposure Control	Pulse Sync In / Pulse Sync Out
Frame Speed	18fps (1x1)
Operating System	Windows7 / Windows10 OS 32 bits or 64 bits
Technical Performance	
Resolution	3.5 lp/mm
Energy Range	≤16 MV
Lag	0.8% @ 1st frame
Dynamic Range	≥86 dB
Sensitivity	620 lsb/uGy
SNR	49 dB @ (20000lsb)
MTF	72% @ (1 lp/mm) 44% @ (2 lp/mm) 25% @ (3 lp/mm)
DQE (2uGy)	66% @ (0 lp/mm) 42% @ (1 lp/mm) 28% @ (2 lp/mm)
Mechanical	
Dimension(H x W x D)	418 x 372 x 31.4 mm
Weight	9.1 Kg
Sensor Protection Material	Carbon Fiber
Housing Material	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	IP65
Power	
Supply	100~240 VAC
Frequency	50/60 Hz
Consumption	10 W

