

Portable digital radiographic inspection DR system



The DR imaging inspection system consists of a flat panel detector, a laptop and software. It can be used directly with the remote computer client developed by our company, which greatly helps cost control and ease of use. Compared with traditional film inspection, it saves film processing time, solves cost and pollution problems, and detects defects online in real time.

Application: Meet the latest GB47013-2023 X-ray digital imaging detection standard. Casting inspection, on-site inspection and rescue of oil and gas pipelines, power system and high-voltage wire clamp inspection, boiler pressure vessels, high-altitude operations in the shipbuilding industry, aerospace industry, etc.

一、Flat Panel Detector Parameters

- 1.1. Flat panel type: amorphous silicon
- 1.2. Scintillator: CsI/GOS
- 1.3. Pixel size: 100 μm
- 1.4. Spatial resolution: 5lp/mm
- 1.5. A/D conversion: 16 bits

1.6. Communication interface: Wired: GigE (≥ 100 Mbps) Wireless: 802.11 a/g/n (≥ 100 mbps)

1.7. Flat panel size (W x L x H): $\geq 269 \times 362 \times 16$ mm (including built-in lithium battery)

Effective imaging area: ≥ 250 mm \times 330mm.

1.8. Flat panel battery: Two removable lithium batteries, each battery lasts 8 hours.

1.9. Background energy range (no need to add radiation protection): 40 ~ 370 kVp (Ir-192);

2.0. Weight: 4kg

The flat panel is equipped with a carbon fiber protective cover to better protect the flat panel.

二、Radiation source

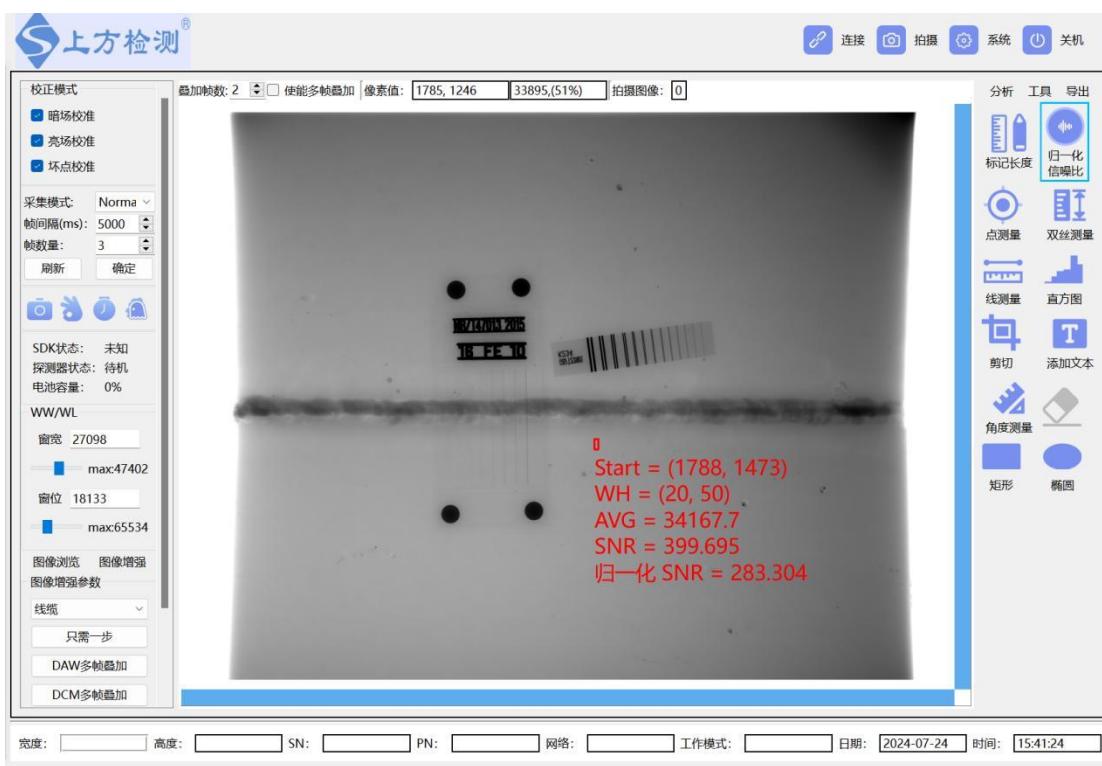
Various radiation sources and high-frequency radiation machines can be configured.



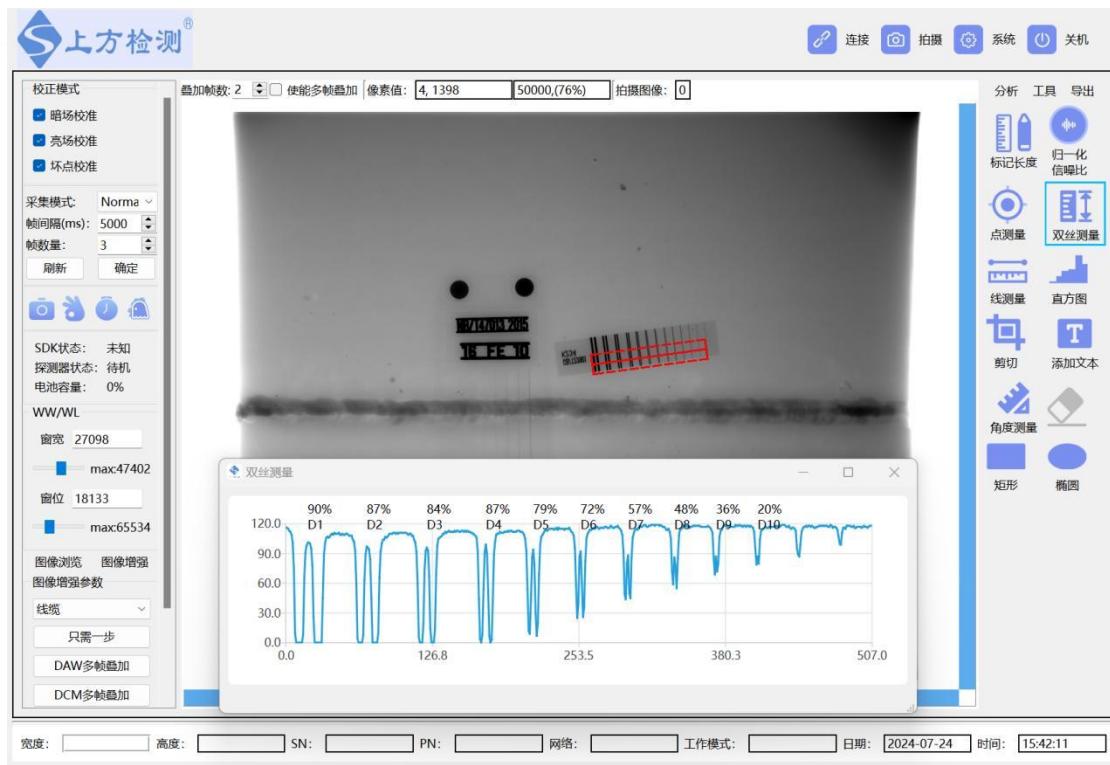
定向机	定向机	定向机	定向机
PXS EVO 160D	PXS EVO 200D	PXS EVO 225D或DS	PXS EVO 300D或DS
22 kg	23 kg	26 kg	29 kg
611 mm	635 mm	708 mm	774 mm
1.0 mm	1.0 mm	3.0 / 1.0 mm	3.0 / 1.0 mm
20 – 160 kV	30 – 200 kV	40 – 225 kV	50 – 300 kV
0.5 – 7.0 mA	0.5 – 6.0 mA	0.5 – 5.5 mA	0.5 – 4.5 mA
750 W	750 W	900 W	900 W
40° x 60°	40° x 60°	40° x 60° / 30° x 60°	40° x 60° / 30° x 60°
Max. 2.0 mSv/h	Max. 2.0 mSv/h	Max. 5.0 mSv/h	Max. 5.0 mSv/h
IP65	IP65	IP65	IP65
-20°C to +50°C	-20°C to +50°C	-20°C to +50°C	-20°C to +50°C
至少1小时	至少1小时	至少1小时	至少1小时



Software operation interface



Double wire effect picture



The test results meet (47013-2023 standard AB level): grayscale value 10%-80%, normalized signal-to-noise ratio 283, image resolution: D10, image sensitivity: W14, workpiece thickness: 6mm. Focal length 600mm.

SF-DR 1013 Digital Flat Panel Imaging system packing list

Ref	Description	Item	Unit	Price	Remark (Standard)
	DR Digital Flat Panel Imaging system	SF-DR1013	1 set		GBT26838-2011
					NBT47013.11
	Configuration				
1	DR Panel	1013	1 pc		NBT47013.11
2	Imaging software	U3.1	1 pc		
3	Laptop	I5	1 pc		
4	Duplex Wire IQI	A125	1 pc		
5	DR panel protector	Carbon fiber	1 pc		
6	WIFI Router	TL-wrd7500	1 pc		
7	APP lock USB Disk		1 pc		
8	Controller Cable	YR-9	1 pc		
9	Power Connecting Cable	YR-3	1 pc		
10	X Ray generator	SF160	1 pc		
11	Controller	SF07	1 pc		
12	Special Packing Box	DR	1 pc		
13	Battery for Panel		2 pcs		