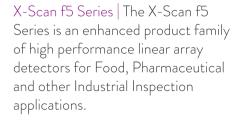
X-Scan f5 Series

X-ray linear array detector



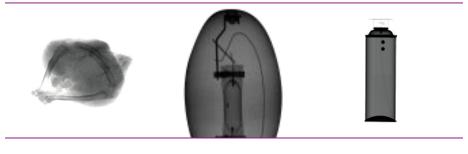








Increased radiation hardness increases the lifespan of the detector, reducing the lifetime cost of the system.



APPLICATIONS

- · Food inspection
- · Pharmaceutical inspection
- · Raw material sorting
- · Foreign particle detection
- · Thickness measurement
- · Tire inspection
- · Foreign particle detection
- · Non-destruction testing

KEY FEATURES AND BENEFITS

- X-ray energy range: 30 160 kVp
- Active length options: from 102 mm to 1638 mm
- Pixel pitch options: 0.2 mm, 0.4 mm and 0.8 mm
- 14-bit AD, Dynamic range: > 4000
- New functionalities including pixel binning and temperature drift compensation
- CE marking (EMC standard compliance)
- High throughput design for maximum scanning speeds with long active detectors
- Increased radiation hardness for longer detector lifespan and reduced life time cost
- Industry leading image quality and speed with high performance DT proprietary photodiode and ASIC designs
- Increased sensitivity and reduced dark image noise for improved image quality
- USB 2.0 and frame grabber interfaces to meet a wide range of compatibility and performance requirements
- Rapid evaluation and software development with included X-View demo software, control library and sample source code

PRODUCT	X-Scan 0.2f5	X-Scan 0.4f5	X-Scan 0.8f5			
X-ray tube voltage Vp range		30-160 kVp				
Scintillator material		GOS				
Active area length	102-1229 mm	102-1638 mm	256-1638 mm			
Number of pixels	512-6144	256-4096	320-2048			
Pixel pitch (spacing)	0.20 mm	0.40 mm	0.80 mm			
Pixel height	0.30 mm	0.60 mm	0.80 mm			
Pixel width	0.15 mm	0.32 mm	0.72 mm			
Maximum scanning speed						
- Active lengths of (102-820 mm)	60 cm/s	166 cm/s	666 cm/s			
- Active lengths of (922-1229 mm)	32 cm/s	121 cm/s	333 cm/s			
- Active lengths of (1434-1638 mm)		65 cm/s				
Maximum Integration Time						
- Active lengths of (102-820 mm)	0.33 ms	0.24 ms	0.12 ms			
- Active lengths of (922-1229mm)	0.62 ms	0.33 ms	0.24 ms			
- Active lengths of (1434-1638 mm)		0.62 ms				
Maximum integration time		128 ms				
A/D resolution		14 bits				
Dynamic range		>4000				
Data digital interface		16 bits				
Interface	USB 2.0	USB 2.0 or Frame grabber (Control: RS232, Image: RS422)				
Linearity		> 99 %				
Operational voltage		+12 V DC, range: 10.5 V - 13.5 V				
Power consumption		60 W max				
IP classification		IP50				
Operational temperature		0 - 40°C				
Operational humidity		30 - 80 %				
Storage temperature		-10 - +60°C				
On-board calibration		Yes				
Binning function		Yes				
AD Gain/Offset calibration		Yes				
Averaging and summing function		Yes				
Temperature drift compensation		Yes				
Support multi USB detectors		Yes				
CE marking		EMC standard compliance (EN61326-1:2013, EN61000-3-2:2006+A1+A2 and EN61000-3-3:20				

ENCLOSURES					
PRODUCT MODEL	Active length	Length	Width	Height	Weight
X-Scan f5-102	102 mm (4.0")				
X-Scan f5-156	156 mm (6.0")				
X-Scan f5-205	205 mm (8.1")	348 mm (13.7")	160 mm (6.3")	50 mm (2.0")	6 kg (13 lbs)
X-Scan f5-256	256 mm (10.1")				
X-Scan f5-307	307 mm (12.1")				
X-Scan f5-410	410 mm (16.1")	450 mm (17.7")	160 mm (6.3")	50 mm (2.0")	7 kg (15 lbs)
X-Scan f5-512	512 mm (20.2")	552 mm (21.7")	160 mm (6.3")	50 mm (2.0")	10 kg (22 lbs)
X-Scan f5-614	614 mm (24.2")	655 mm (25.8")	160 mm (6.3")	50 mm (2.0")	12 kg (26 lbs)
X-Scan f5-717	717 mm (28.2")	759 mm (29.9")	160 mm (6.3")	50 mm (2.0")	13 kg (28 lbs)
X-Scan f5-820	820 mm (32.3")	860 mm (33.9")	160 mm (6.3")	50 mm (2.0")	15 kg (33 lbs)
X-Scan f5-922	922 mm (36.3")	962 mm (37.9")	160 mm (6.3")	50 mm (2.0")	16 kg (35 lbs)
X-Scan f5-1229	1229 mm (48.4")	1270 mm (50.0")	160 mm (6.3")	50 mm (2.0")	21 kg (46 lbs)
X-Scan f5-1434	1434 mm (56.5")	1474 mm (58.0")	160 mm (6.3")	50 mm (2.0")	25 kg (55 lbs)
X-Scan f5-1638	1638 mm (64.5")	1678 mm (66.1")	160 mm (6.3")	50 mm (2.0")	28 kg (62 lbs)

DETECTION TECHNOLOGY PLC