

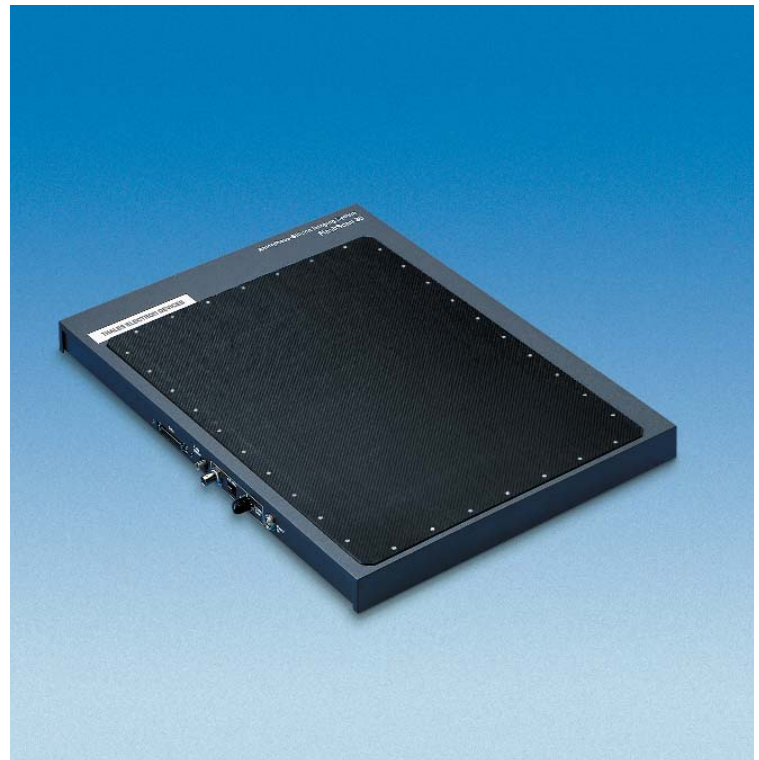
# FlashScan 35

Digital X-Ray Imaging Subsystem

Ultra wide dynamic range:  
14-bit grayscale image

**12" x 16" active image area**

- Highly integrated subsystem
- 12" X 16" active image area
- High resolution:  
127  $\mu\text{m}$  pixel size
- Frame rate: 1.4 second



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FlashScan 35

The FlashScan 35 digital imaging subsystem has been specifically designed for integration into non-destructive testing equipment. Its large format (12" x 16" active image area) and its wide dynamic range eliminate the need for X-Ray film in many radiographic applications. Just seconds after exposure, the FlashScan 35 generates 14-bit grayscale images, with film-like quality details, which can be viewed immediately on a computer screen.

The FlashScan 35 is a highly integrated subsystem including amorphous silicon image sensor array, X-ray conversion screen supporting electronics, frame-grabber card for accelerated processing, X-ray safety interlock, and power supply.

This product is designed, developed and manufactured at an ISO 9001 : V 2000, ISO 14001 and EN 14001 production site registered.

### FlashScan 35 features

Image sensor type	large format amorphous silicon array + conversion screen		
Active area	293 x 406	mm	
Format	2 240 x 3 200	7.1 millions pixels	
Pixel size	127	µm	
X-Ray conversion screen	Gd <sub>2</sub> O <sub>2</sub> S:Tb		
Conversion screen density (1)	130	mg/cm <sup>2</sup>	
Energy range	25 to 160	keV	typ.
X-Ray window material	carbon-fiber		
MTF @ 80 kVp, 2 lp/mm	> 45	%	
MTF @ 45 kVp, 2 lp/mm	> 60	%	
Dynamic range	≥ 3 500:1		
Analog-to-digital converter	14	bits <sub>≧</sub>	
Non uniformity	≤ 1% after correction		
Exposure window:			
• internal trigger	2.7	sec	max.
• external trigger	120	sec	max.
Frame rate	1.4	sec	approx.
Interface and acquisition card	PCI-based frame grabber		
Software features:	<ul style="list-style-type: none"> <li>• image acquisition • gain &amp; offset correction • window &amp; level adjustment • control dialogue • bad pixels correction</li> <li>• display calibrations, raw and corrected image • pixel value monitoring • save as 8, 16-bit TIFF image • histogram</li> <li>• magnify • printing • profile</li> </ul>		

### PC requirements

PC 500 MHz minimum, with PCI bus	256 MB	RAM	min.
Operating system	Windows NT 4.0 - Windows 2000 - Windows XP		

The PC is not part of the delivery.

### Mechanical characteristics

Imaging system:			
• dimensions	50 x 36.6 x 4.6	cm	
• weight	9.1	kg	
Power supply:			
• dimensions	25 x 25 x 9	cm	
• weight	3.6	kg	
• power	115 V AC, 60	Hz	
	220 V AC, 50	Hz	
Cable length (2):			
• system to computer	10	m	
• power supply to system	5	m	
• fiber-optic from system to X-Ray safety switch	10	m	

(1) FlashScan 35 products with other screens may be ordered. Please, consult Thales Electron Devices.

(2) Other cable lengths available on request.

This document cannot be considered to be a contractual specification. The information given herein may be modified without notice due to product improvement or further development. Consult Thales Electron Devices before making use of this information for equipment design.



For further information, please contact:

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