

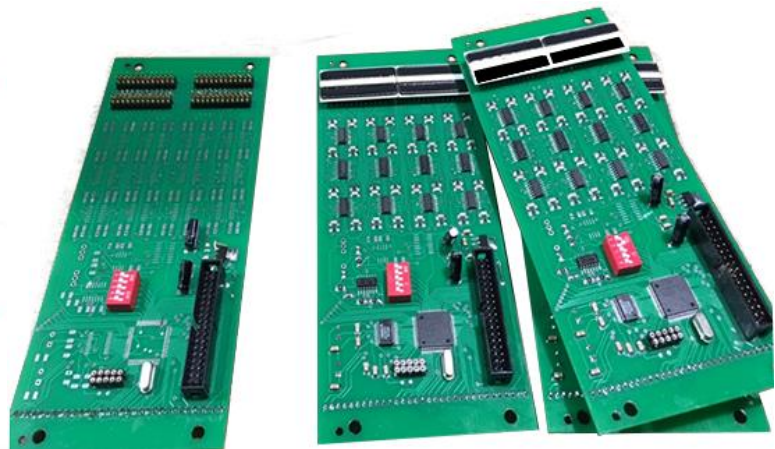


## DEXON X-Card Series

**DEXON X-Cards** are series of pixelized single/dual energy X-ray detection card for detection of 20 kV up to 250kV X-ray photons in a narrow fan beam. DEXON X-Card series are readout by a specially designed DEXON-DAQ data acquisition board. These detector series are compatible with RAXON X-ray sources. High detection sensitivity, large dynamic range, high SNR and durability are key features of these X-Cards. Either analog or digital signal processing modules may be used for these detection cards depending on the application and user customary requirements, while in both cases technical parameters such as integration time, gain, signal threshold noise level and readout frequency are optimally set according to the application.

## Applications

- Security inspection
- Cargo and vehicle inspection
- Multi-view imaging
- Non-destructive testing
- Food inspection
- Raw material sorting
- Thickness measurement
- Impure particle detection
- CT imaging
- Material densitometry



## Technical Specifications

<b>X-Ray Characteristics</b>	Up to 250kV X-ray beam originated from a nominally 250kV X-ray tube with beam current of 0.1 to 3mA
<b>Detector Arrays</b>	16/32 elements dual stage Scintillator/Photodiode (PIN diodes)
<b>Array Pixel Pitch</b>	0.4 to 2.5mm
<b>Number of Detector arrays on board</b>	2 or 4 pcs/card
<b>Integration time</b>	Min. 100µSec to several hundred mSec
<b>ADC resolution</b>	12-16bits
<b>Actual dynamic range</b>	At least 11bits
<b>Noise removal</b>	Automatic threshold noise/dark current removal
<b>Operating Temperature</b>	0°C to +40°C
<b>Storage Temperature</b>	-40°C to +70°C
<b>Humidity</b>	10% to 95% relative humidity, non-condensing
<b>Electrical Power</b>	12VDC, <100mA each card



## DEXON Single Energy Series

	Model	Pixel Pitch	Voltage
DEXON100HR	DEXON100S210	1mm	100kV
	DEXON100S410	1mm	100kV
	DEXON100S215	1.5mm	100kV
	DEXON100S415	1.5mm	100kV
	DEXON100S216	1.6mm	100kV
	DEXON100S416	1.6mm	100kV
	DEXON100S225	2.5mm	100kV
	DEXON100S425	2.5mm	100kV
	DEXON160HR	DEXON160S210	1mm
DEXON160S410		1mm	160kV
DEXON160S215		1.5mm	160kV
DEXON160S415		1.5mm	160kV
DEXON160S216		1.6mm	160kV
DEXON160S416		1.6mm	160kV
DEXON160S225		2.5mm	160kV
DEXON160S425		2.5mm	160kV
DEXON200HR		DEXON200S210	1mm
	DEXON200S410	1mm	200kV
	DEXON200S215	1.5mm	200kV
	DEXON200S415	1.5mm	200kV
	DEXON200S216	1.6mm	200kV
	DEXON200S416	1.6mm	200kV
	DEXON200S225	2.5mm	200kV
	DEXON200S425	2.5mm	200kV

## DEXON Dual Energy Series

	Model	Pixel Pitch	Voltage
DEXON100HR	DEXON100D210	1mm	100kV
	DEXON100D410	1mm	100kV
	DEXON100D215	1.5mm	100kV
	DEXON100D415	1.5mm	100kV
	DEXON100D216	1.6mm	100kV
	DEXON100D416	1.6mm	100kV
	DEXON100D225	2.5mm	100kV
	DEXON100D425	2.5mm	100kV
	DEXON160HR	DEXON160D210	1mm
DEXON160D410		1mm	160kV
DEXON160D215		1.5mm	160kV
DEXON160D415		1.5mm	160kV
DEXON160D216		1.6mm	160kV
DEXON160D416		1.6mm	160kV
DEXON160D225		2.5mm	160kV
DEXON160D425		2.5mm	160kV
DEXON200HR		DEXON200D210	1mm
	DEXON200D410	1mm	200kV
	DEXON200D215	1.5mm	200kV
	DEXON200D415	1.5mm	200kV
	DEXON200D216	1.6mm	200kV
	DEXON200D416	1.6mm	200kV
	DEXON200D225	2.5mm	200kV
	DEXON200D425	2.5mm	200kV

Abbreviation: DEXONXXXYZT (XXX=kV, Y=Single/Dual Energy, Z=Number of Arrays on Board, T=mm Pixel Pitch×10)