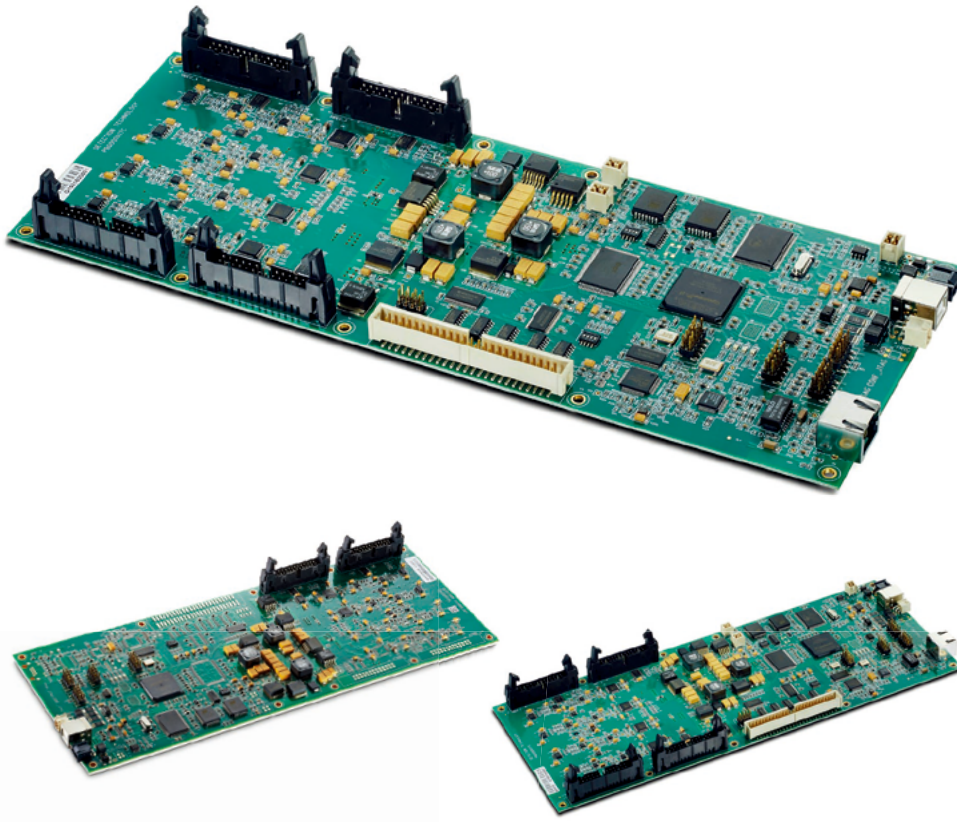


X-DAQ

Data acquisition and control board for X-Cards



X-DAQ | X-DAQ is designed to be used with Detection Technology's linear array X-ray detector cards, like X-Card 1.5-64DE. X-DAQ and detector cards together provide a complete detector subsystem for

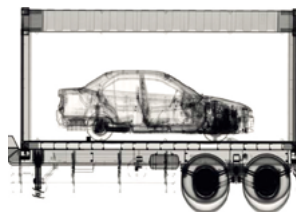
X-ray image acquisition. Typically only power supply and Ethernet need to be connected to X-DAQ. Demonstration software and interface libraries for host computer are available.

APPLICATIONS

- Security inspection
- Multi-view imaging
- Non-destructive testing
- Food inspection
- Raw material sorting
- Thickness measurement
- Foreign particle detection
- CT imaging
- Bone densitometry

KEY FEATURES AND BENEFITS

- Single +12 or +24 VDC power input for powering the complete detector system
- Cascade connection for up to 23 pcs of 64 channel dual energy detector cards or 46 single energy detector cards
- Simultaneous line integration and data read out
- 16-bit data acquisition and output
- Real-time image data connection to host computer via Ethernet, Frame Grabber or USB interface. Demonstration software and interfacing libraries available
- On-board signal processing functions. Including gain and offset normalization, line summing or averaging and binning functions
- Diagnostics functions. Including data test patterns, remote readable temperature sensor and status indicator LEDs
- Line and frame trigger inputs for optional synchronization with a complete X-ray system

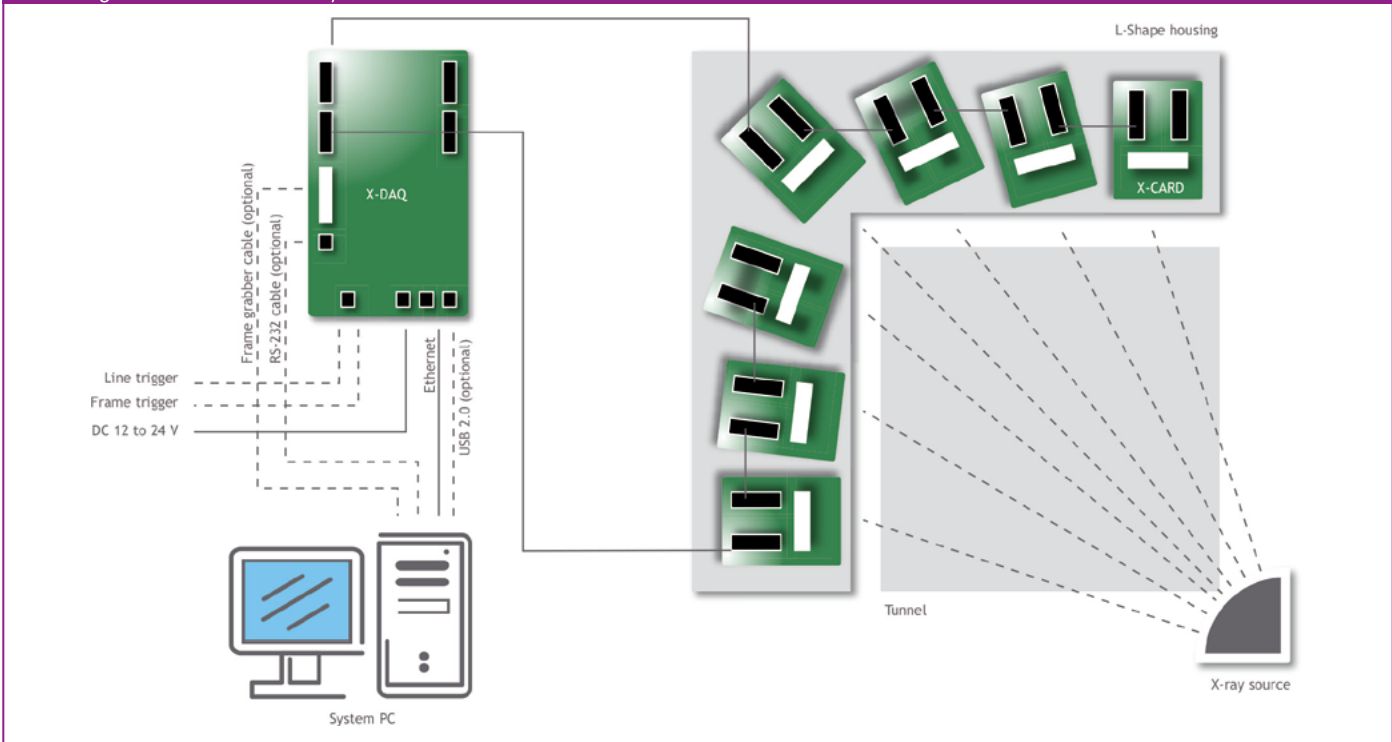


GENERAL CHARACTERISTICS

PRODUCT	Minimum	Maximum
Input voltage	10.5 V	28.0 V
Input current	0.2 A	2.0 A
Input power (including detector card)	6 W	22 W
Number of detector cards (max)*	Dual energy: 23 Single energy: 46	
Detector cards per video channel	12	
Integration time	0.75 ms	128 ms
Sampling speed	7.8 lines/s	1333 lines/s
Scanning speed (= belt speed with 1.5 mm pixel)	12 cm/s	200 cm/s
Ethernet data rate	18 Mbps	
USB data rate	160 Mbps	
Frame grabber data rate	640 Mbps	
System linearity	>99%	
Mechanical dimensions	310 mm (L) x 120 mm (W) x 31 mm (H)	

* depending from X-Card type. For larger configurations, several X-DAQs can be connected in parallel

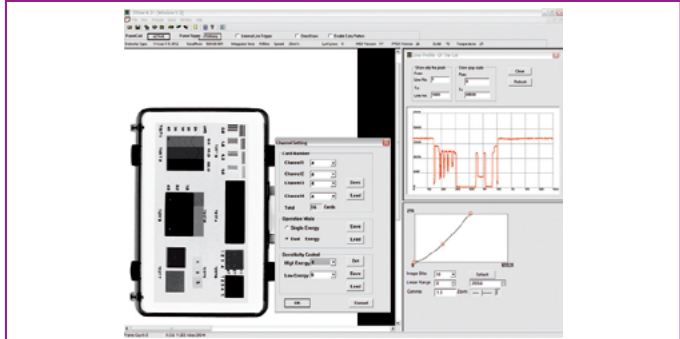
Block diagram of the detector subsystem



Building blocks of a complete X-ray detector system



X-View demonstration software for X-DAQ



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