X-IM ME3

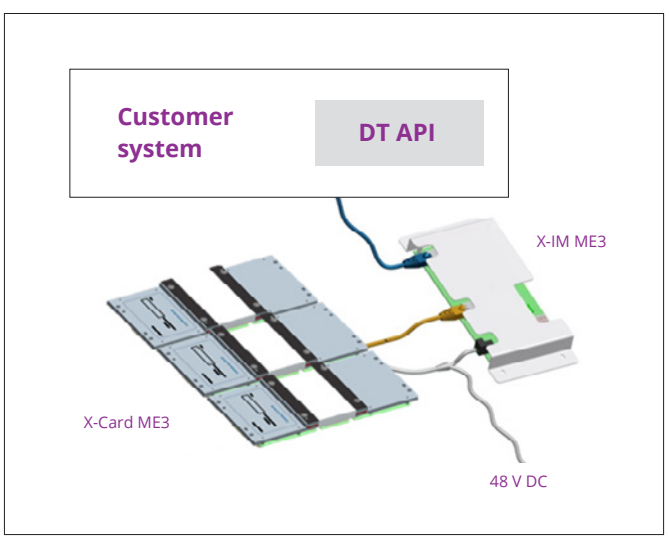
X-Card ME3 compatible control unit

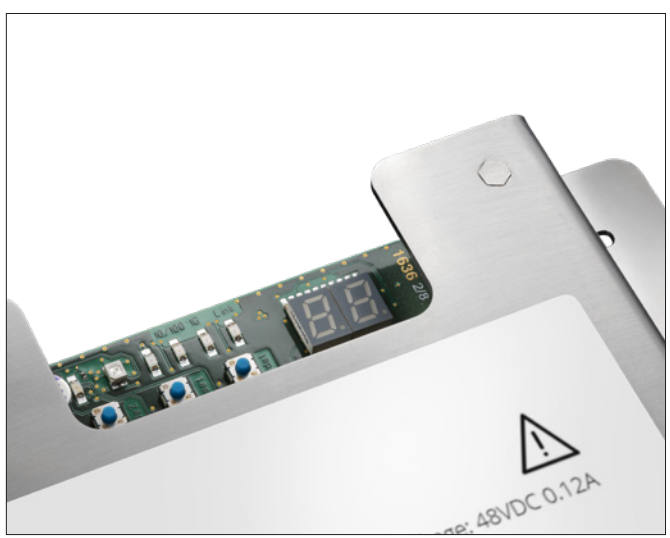
- Enables high-speed, real-time photon counting and precise photon energy measurement
- Makes it easy to build high-performance and reliable X-ray imaging subsystems
- Enables the connection of up to 30 pieces of X-Card ME3
- High throughput data transfer speed of up to 800 Mbps
- Diagnostics functions
- EMC compliance

X-IM ME3 is a high-speed and robust control unit enabling real-time photon counting and accurate photon energy measurement. It operates as a data acquisition board in X-Card ME3 powered detector subsystems. Combining a number of multi-energy detector boards with one or more ME3-optimized control units makes it easy to build high-performance and reliable X-ray imaging systems for a variety of security and industrial applications.

The robust and reliable X-IM ME3 links detector boards to the acquisition computer. It controls configurations of the detector boards and transfers the acquisition data from the boards to the host computer. The GigE compatible control unit provides a data transfer rate of up to 800 Mbit/s.

X-IM ME3 has a compact mechanical size, and comes with on-board signal processing and diagnostic functions. Demonstration software, a control library and a sample source code are available to speed up evaluation and software development.





Key features

- CdTe semiconductor detector element
- Gigabit Ethernet interface
- Soft and hard reset of the detector subsystem
- Diagnostic functions:
  - Data test patterns, remotely readable temperature sensor, and status indicator LEDs (data transfer speed, fatal errors)
  - Digital display
- External synchronization capability
- Remote firmware upgrade
- SW kit available to support easy integration
  - Windows or Linux compatible API (application programming interface)
  - Test tool
  - SDK (Software development kit)

Applications

- Screening of carry-on and checked-in baggage, parcel, mail, air cargo, and persons
- Product safety and quality inspection, material sorting and process control in a variety of industries

Key characteristics

Parameter	Specification
Product code	3000027272
Gigabit Ethernet link	Up to 800 Mbps
Data transfer standard	GigE vision
Communication port	RJ-45
Maximum detector length	3840 pixels / 3069 mm
Mechanical dimensions	260 mm x 110 mm x 26.5 mm
Weight	0.5 kg
External synchronization signal	Based on RS-422 standard – DB9 connector
Operational voltage and power	48 VDC, 12W (max 15 W)
EMC compliance	EN 61326-1, EN 61000-4-2, EN 61000-4-3
RoHS compliance	Yes
Operational temperature and humidity	0°C to +40°C, 5-95% RH non-condensing
Storage temperature	-20°C to +60°C

Mechanical dimensions

Detection Technology