

Xplore with X1

Xplore EDS Detector with X1 high throughput pulse processor

Xplore is ideal for routine EDS analysis with improved productivity in the SEM. Xplore offers excellent resolution at high count rate:

- Mapping can be carried out at count rates >1,000,000 cps
- Quantitative analysis at count rates >100,000 cps

Detector	Sensor Area (mm²)
Xplore	15, 30 and 65
Resolution guarantees	Resolution guaranteed and tested on installation using an X1 pulse processor, between 10°C and 30°C up to 1500 m ● Mn Kα res guaranteed to be <129 eV at 100,000 cps
Detector range	Detection from boron (B) to californium (Cf) for 15 mm² Detection from Beryllium (Be) to californium (Cf) for 30 and 65 mm²
Low Energy Performance	Incorporates SATW ultra-thin polymer window for the best low energy performance.
In-field repair	New compact design offers a small footprint and unique capability for in-field repair for maximum up-time and minimum service requirement
Cooling	LN ₂ -free, vibration-free, Peltier Cooling ● Requires only an electrical supply ● No external compressors, chillers, or gas lines required - no vibration

As standard:

Relate uses the HDF5 (hierarchical data format version 5) data format, which is ideal for handling large and complex datasets.

- Manual slide
- Field replaceable components
- Customised detector interface for your microscope with 'O' ring vacuum seals to the chamber
- Manufactured under ISO9001 standard
- Geometry design with an optimal take off angle to maximise count rates and solid angle (specific to each microscope)

Xplore Environmental Specifications

These requirements are necessary for the installation and operation of the system and are the responsibility of the purchaser:

- Operating temperature: 10°C to 30°C
- Operating humidity: <80% relative humidity, non-condensing

X1 Pulse Processor & Imaging Electronics

X1 is the latest generation pulse processor with fully integrated microscope digital control and image capture. X1 uses fully digital pulse processing for accurate handling of very high count rates. Ethernet high speed communications connect with the analyser PC.

- Digital pulse processing and control for 1 EDS detector
- 2 imaging inputs
- Microscope X,Y beam control
- Power on, standby, reset button
- Status indicator
- Internal temperature sensors
- Built in diagnostic voltage and current measurements

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