# **Microscope Accessory Solutions**

#### Solid state SEM Backscattered electron detector

- Retractable or fixed installation
- 10mm, 18mm or 24mm diodes
- Excellent quality TV rate imaging
- Optional bellows for HV/UHV installations
- Optional motorised insertion/retraction
- PC control with USB interface

The KED Generation5 amplifier system can be configured with 1,2,4,5, and 6 input channels combined with a choice of 1, 2 or 3 output channels.

The unique FIND feature allows even inexperienced microscopists to achieve acceptable imaging at the touch of a button. The unrivalled scope of adjustability available to the operator then permits highly optimised images to be taken.

Matched to the latest developments in our low kV silicon detector technology, the choice of 10mm, 18mm, or 24mm diodes can be mounted on either a retractable arm or in many cases to the tip of the lens.

Both Generation 5 BSD and STEM detectors can be optionally specified with motorised insertion/ retraction. The Motorised Detector is designed with 3 individual operating positions allowing the use of the detector in its accurately aligned inserted position, a Faraday Cup position, as well as the fully retracted position.

Alignment of the detector positions is normally better than  $20\mu m$ . Control is via key pad controller or a small pop up window on the console monitor and is particularly useful when the detector is mounted in an inconvenient position such as to the rear of the column, or when used in a hazardous environment such as a hot cell.

A metal bellows sealed version is available for high vacuum or high temperature applications.



**Retracting diode** 



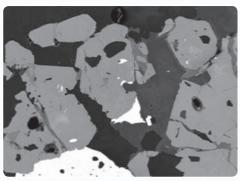
Fixed diode



Solid state Backscattered electron detector



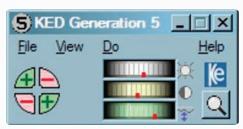
**KED Gen5 Backscattered detector** 



**Backscattered SEM image of polished Granite** 



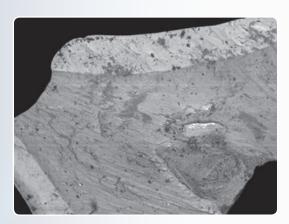
Motorised detector insertion arm



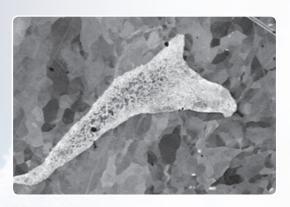
Software interface

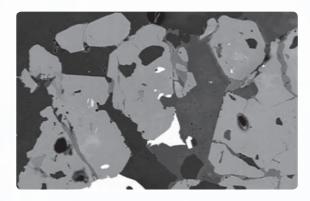
# **Microscope Accessory Solutions**

## **Applications:**









## **Specifications:**

- Fixed or retractable mounting mechanics including feed-through flanges and mounting adaptors to suit all SEMs
- 4 channel system (optional 6 channels)
- 18mm low kV silicon detector
- 8,000,000: 1 total gain range, auto control system with imaging to TV rate
- Generation5 amplifier system with all cables and manuals
- PC software for USB system control
- Easy to use software control interface compatible with Windows™ XP/7.0 32 bit
- Operating voltage 115/230V
- Fully CE and RoHs compliant

### **Options:**

- Bellows sealing
- Motorised insertion/retraction
- UHV version
- 10mm or 24mm diodes

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