



XeSwitch

XENOS Lithography PCD Beam Blanker

Update your Scanning Electron Microscope with a fast electrostatic beam blanker and probe current detector

The *XeSwitch* electrostatic beam blanker and probe current detector (PCD) upgrades your SEM with the ability to blank the electron beam fast enough for e-beam lithography applications

(e.g. when equipped with a XENOS XeDraw or XPG2 lithography system) and the possibility to measure the beam current directly in the column

Features

The XENOS *XeSwitch* beam blanker uses electrostatic blanking plates and a high speed high voltage blanking amplifier to allow fast beam blanking for lithography or other applications.

As well, it is equipped with a Faraday cup and picoamperemeter to allow precise beam current measurements directly at the beam within the electron optical column.

The blanker head with blanking plates is positioned at the beam axes by a piezo drive within the vacuum chamber of the blanker, thus no mechanical feedtroughs to the vacuum of the column are needed .

With the ability to position the blanker at either the blanking or Faraday cup position, it is as well possible to fully retract the blanker from the beam axes in order to provide zero beam influence during observation mode.

Integration

Integration into existing systems does not require any complicated and expensive column modification. The blanker fits into almost any JEOL or Hitachi SEM equipped with a PCD port.

The blanker can be controlled via USB interface, a desktop unit allows manual control of blanker-head position and operating parameters. The same desktop unit can control the XENOS XeMove lithography stage if fitted to the litho system.

Specifications

Blanker Modes:	Blanking, PCD functionality, retracted
Rise- and falltime:	25 ns
Blanking electrodes:	Titanium, 0.4 mm gap
Interface:	fibre optic or TTL for blanking pulse, USB for control
Maximum electron energy:	30 keV

Contact Details

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