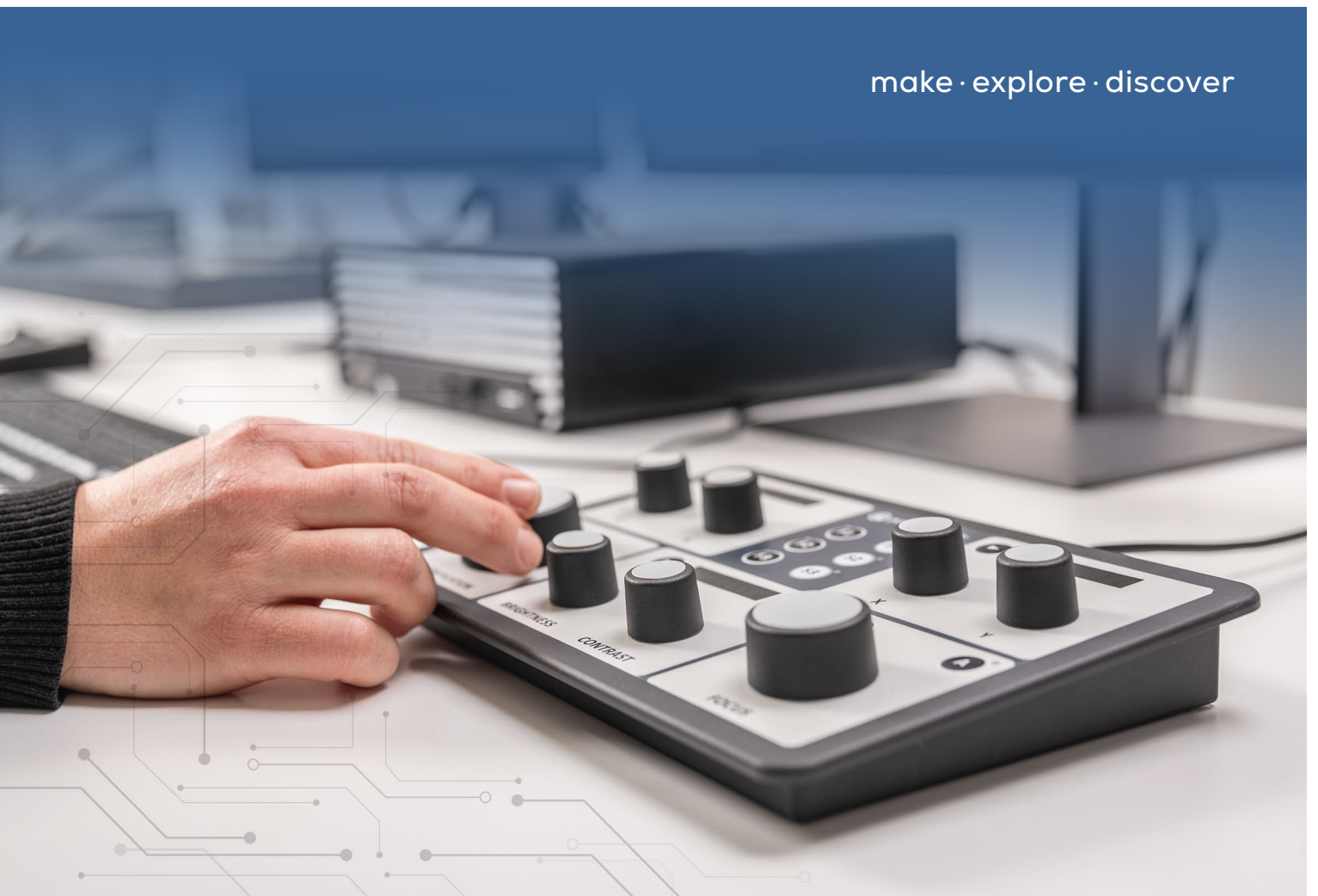
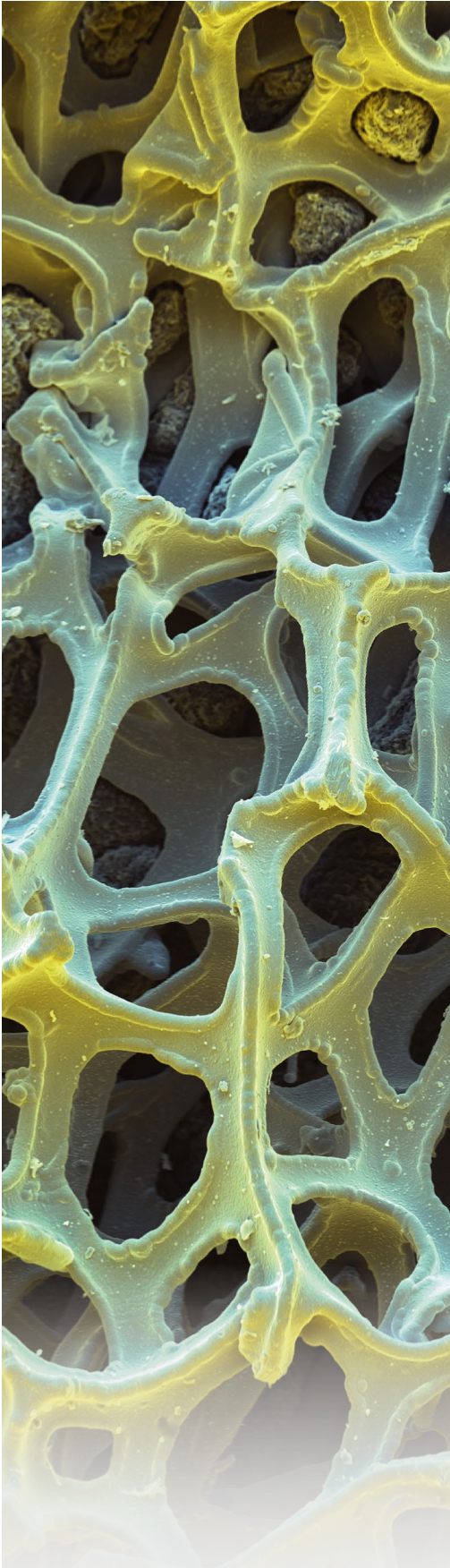


make · explore · discover



SEM upgrade

A second life for your SEM -
new electronics, software and controls.



**We extend the lifetime
of your microscope –
with new hardware
and software.**

Our upgrade **adds the latest technology for image acquisition, controls and software** to your electron microscope.

You keep a fully **serviceable system** - 10+ years spare part guarantee for point electronic products.

Bespoke solution - we provide you with an upgrade **customized to your specific needs.**

Maintain many of your **established/certified workflows** and **customized add-ons**

We **simplify operations** through automation.

We handle the deinstallation of your old equipment and the on-site **installation** of the SEM upgrade for you, in most cases directly in your lab.

Upgrades take around **3 days**.
This keeps downtime to a minimum.

With our **included training** you will be fit for our applications within 1 day.

Our upgrade installation:
<https://youtu.be/MzGsAfeRamU>



**Watch it
happen!**



We upgrade your SEM

Advantages



State-of-the-art technology

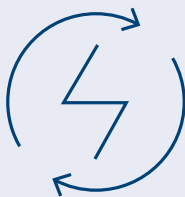
- The most powerful and versatile image acquisition system available (DISS6)
- MS Windows 11 with network compatibility
- Simultaneous acquisition of multiple signals and detectors
- Fully integrated automation functions
- High-quality hard panels for imaging and stage control (not restricted to mouse control)
- User-friendly, manufacturer-independent control software - faster results from sample insertion to final image



Reduce costs

- Extended lifetime
- Lower costs of ownership
- Reduced/no downtime
- 10+ years spare part support
- Maintain proven/certified workflows
- Keep customized add-ons, avoiding time and costs for reconfigurations
- Save lab space thanks to compact and integrated design*
- Universal GUI for all upgraded tools independent of manufacturer - ideal for multi tool environments, reducing training time

*depending on model



Sustainable use of resources

- Reduce your company's environmental footprint by upgrading an existing and reliably working instrument instead of scrapping
- Up to 3 times lower power consumption
- Shorter repair times & remote support
- Cost effective - save time by avoiding long lasting tenders and purchase processes

Is your SEM outdated?

Why consider a SEM upgrade instead of buying a new one.*

*
Or would you tear down the Berlin TV tower just because its elevators stopped working?



Costs

Extend the lifetime of an existing SEM through our upgrade is more cost effective than the acquisition of a new microscope and all the add-ons you might need for your work. In addition new electronics reduce service costs.



Maintenance

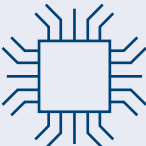
Manufacturer support is ending for many instruments because of obsolete electronics parts. We guarantee full service support of your upgraded system for 10+ years for all products of point electronic GmbH. As the manufacturer of the upgrade electronics, we are in full control of our own spare parts supply.



Time

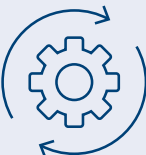
For a new SEM purchase, lead times can be up to 1 year. Applying for the respectively very high budgets also takes time and effort. The delivery time of our SEM upgrade electronics and the installation is usually just a couple of weeks.*

* Depending on availability of the components.



Technology & performance

Does your device require better resolution, faster image acquisition or to acquire simultaneously multiple signals? Is it not network compatible, or does it require a remote control option? These functions are included as standard in our SEM upgrade.



Workflow

New devices often mean redeveloping and retraining of existing workflows and add-ons. We keep the upgrade as user-friendly as possible. By maintaining established/certified workflows you can keep your customized equipment.

Your SEM is as unique as your imagination

We change everything that needs changing and keep what is important.

• You keep

Your column incl. HV-PSU and pumps

Your add-ons, according to functionality and your requirements (such as EDX, EBSD, etc).

Your established/certified workflows

Your laboratory layout and ancillary equipment

+ We add

State of the art electronics

User friendly software with efficient workflows

Improved performance

Network compatibility

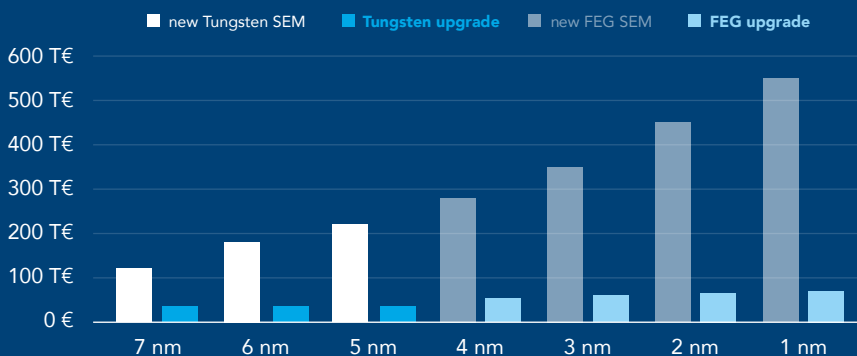
New techniques

Reduced costs

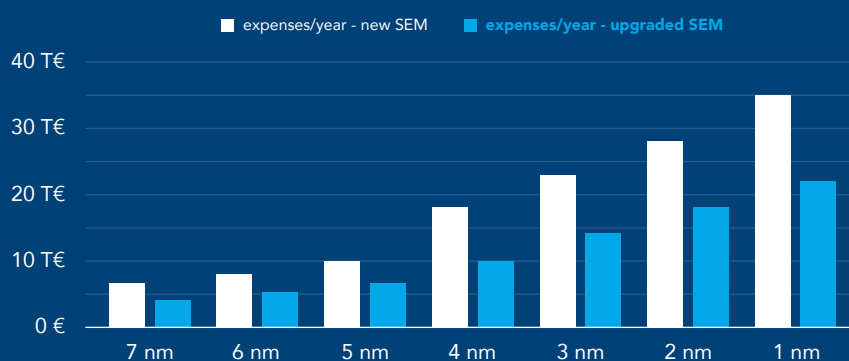
Environmental friendliness

Costs of ownership

Compared to a purchase of a new electron microscope, our SEM upgrade significantly saves costs in the long and in the short term.

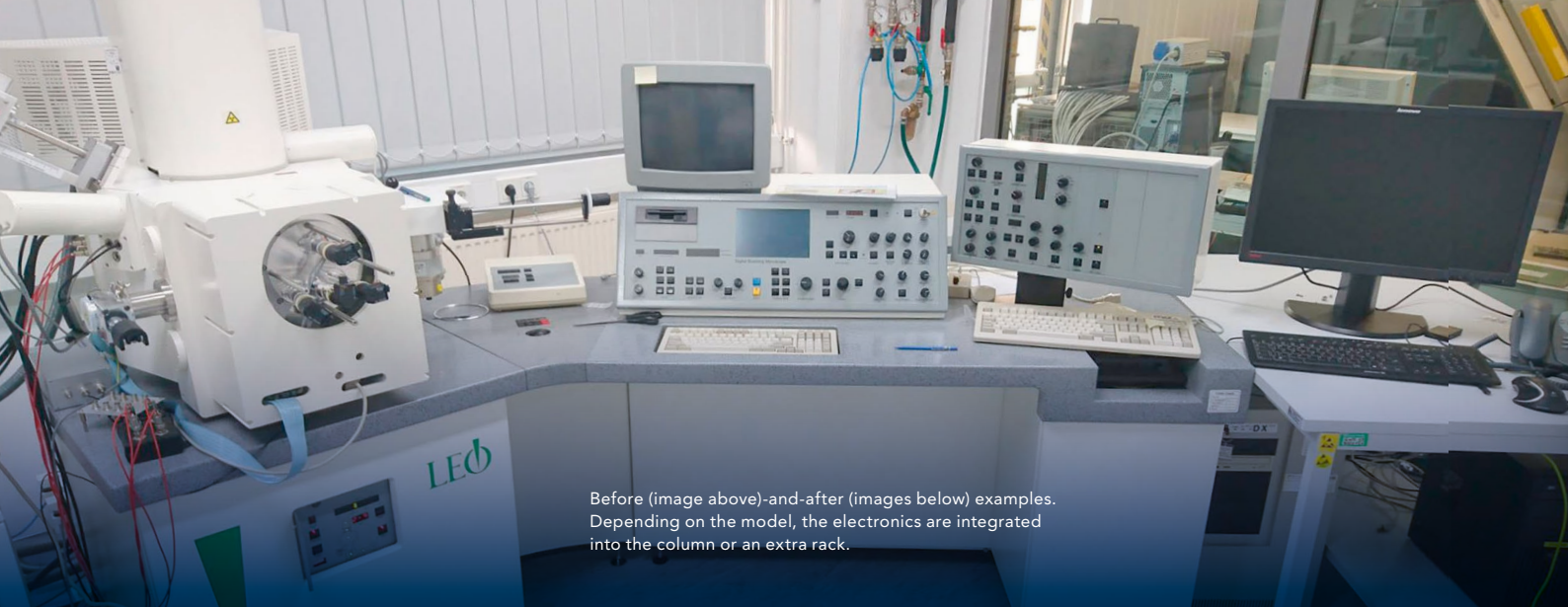


Purchase costs for a new SEM, compared with an upgrade in relation to resolution capabilities*



* depending on model and configuration

Annual service costs of a new SEM, compared with an upgraded SEM in relation to resolution capabilities*



Before (image above)-and-after (images below) examples.
Depending on the model, the electronics are integrated
into the column or an extra rack.

From old ↑ into state-of-the-art ↓

Space-saving and cutting-edge technology



Book a demo with us:
info@pointelectronic.de



Every upgrade we offer is a specifically tailored solution for our
customer's needs and the continuous development of our products.

We upgrade your SEM

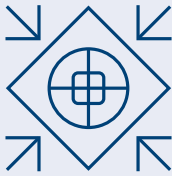
What's included



Controls and acquisition upgrade

- New SEM control electronics and software
- Support for Microsoft Windows 7 up to 11, with full network compatibility
- Versatile and fast scanning system - simultaneous signal acquisition for up to 20 signals (SE, BSE, EDS, WDS, etc.), image resolution of up to 500 MPixels, scanning speed down to 10ns dwell time
- Automatic vacuum, gun, stage and detector controls
- New hard panels for column, detector and stage control
- IR chamberscope*
- PC and display(s) or laptop**

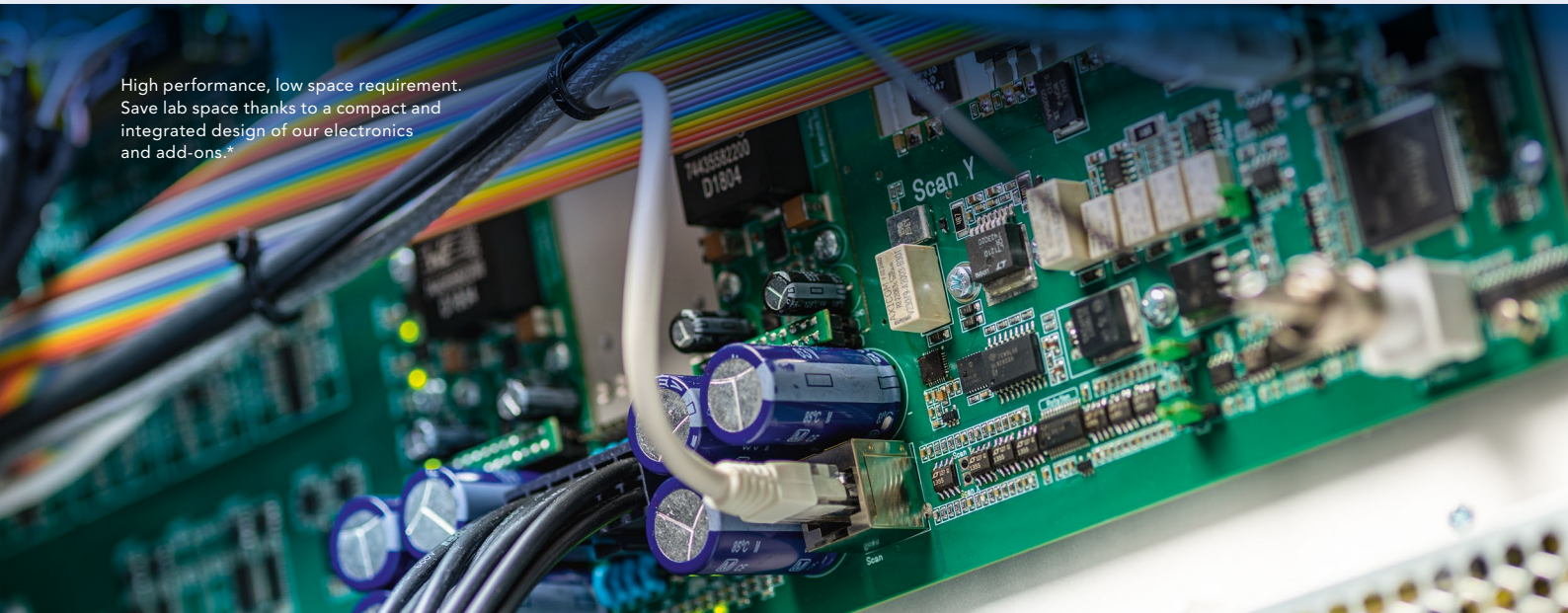
* for most models, ** optional



The upgrade unlocks access to the following techniques

- Atomic-number discrimination with BSE detectors
- Topography measurements with shape-from-shadow
- Micro-analysis with EDS detectors and mapping
- Electrical failure analysis with EBIC and EBAC/RCI

High performance, low space requirement. Save lab space thanks to a compact and integrated design of our electronics and add-ons.*



Cambridge | FEI/Philips | Hitachi | Jeol
LEO | Philips | TESCAN | ZEISS

point electronic GmbH - an expert you can rely on.

We are **among the pioneers in the field of electron microscopy** and developed one of the world's first digital image acquisition systems. Today - 25 years later - its further developed version is one of the **best image acquisition systems on the market.**

We look back on a long tradition in the **development of highly specialized instruments and technologies for imaging and signal processing.** We are driven by the mission to improve the performance of electron microscopes and to enable our customers.

Service is in our genes. point electronic GmbH started as a service company for electron microscopes. The company evolved through the development of our own products.

Trust is very important to us. We are a 2nd generation **family business**, motivated from the beginning by the passion and engineering principles to **get the best out of an electron microscope.**

Our team of **engineers, software developers and production employees** contribute to that commitment.

Extensive upgrade experience - **global customers** already benefit from the performance boost for their SEM.

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