

# Your Partner for Semiconductor Process Control



## **ZEISS OEM Spectrometers**

Working in concert with you we develop superior OEM spectroscopy solutions upon proven ZEISS technology and expertise

[www.zeiss.com/spectrometer-modules](http://www.zeiss.com/spectrometer-modules)



Seeing beyond

# Our Technology is Your Solution

Using ZEISS spectrometers for process can give you the edge when developing your OEM solutions. Take advantage of proven ZEISS technology, which can be completely tailored to your needs.

## ZEISS as OEM Supplier – Applications



### Etching Process Control

ZEISS spectrometers are ideally suited for the end-point detection and thickness monitoring of etching processes via Optical Emission Spectroscopy (OES), Ellipsometry or Spectral Reflectometry.



### CMP Process Control

ZEISS develops customized spectrometer solutions for the Chemical Mechanical Polishing (CMP) monitoring of wafers via high-end thickness measurements.



### Critical Dimension Metrology

ZEISS Spectrometers enable the metrology of CD variations of die structures on a wafer via optical scatterometry (OCD).

## ZEISS Spectrometers – Your benefits

- Highest Wafer Throughput due to minimal integration time
- Fast Scalability for Volume Production
- Small tool-to-tool Variability
- Long-term Stability & Calibration
- Customized Spectrometers with ZEISS Abberation Corrected Gratings and various Detector / Slit-Size Options



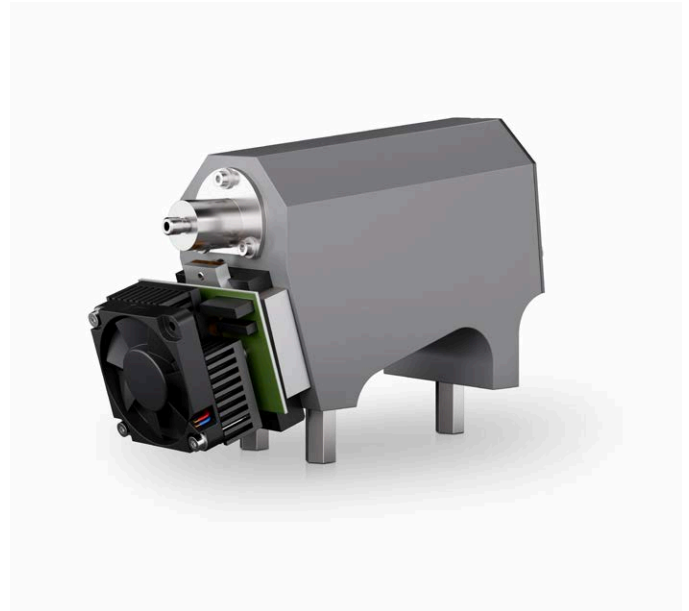
**Get in touch to start the conversation**

Simply scan the code for more information

### MCS-PDA

Wavelength range	190–1015 nm
Optical Input	SMA*
Numerical Aperture	0.22
Spectral Pixel pitch	0.8 nm
Straylight	< 0.1 % (at 340 nm)
Detector	S 3904-1024Q (1024 px)*
SNR	> 12,000
DNR	> 23,000
Integration time	> 1.1 ms

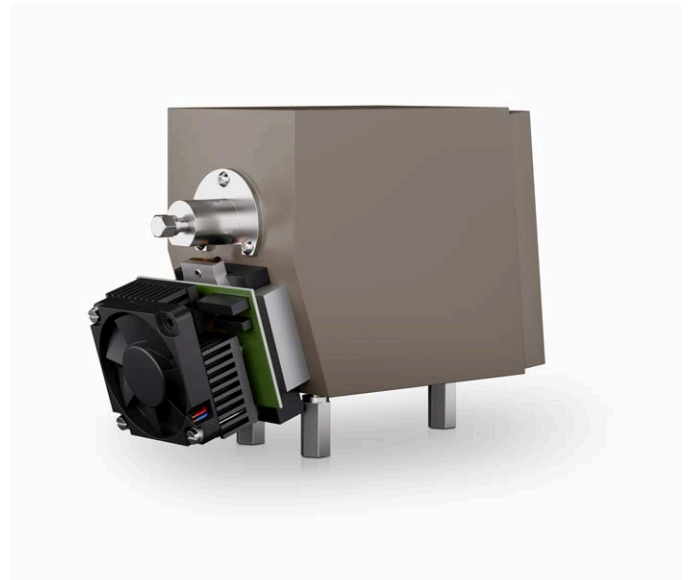
\*others available on request



### MCS-CCD

Wavelength range	190–980 nm
Optical Input	SMA*
Numerical Aperture	0.22
Spectral Pixel pitch	0.8 nm
Straylight	< 0.1 % (at 340 nm)
Detector	S 7031-1006 (1044 x 64 px)*
SNR	> 1,000
DNR	> 32,000
Integration time	> 3 ms

\*others available on request



### CGS-CCD

Wavelength range	190–1015 nm
Optical Input	SMA*
Numerical Aperture	0.22
Spectral Pixel pitch	0.4 nm
Straylight	< 0.1 % (at 240 nm)
Detector	S 11156 (2048 px)*
SNR	> 500
DNR	> 8,600
Integration time	> 0.1 ms

\*others available on request



**Carl Zeiss Spectroscopy GmbH**

Carl-Zeiss-Promenade 10  
07745 Jena, Germany

Phone: + 49 3641 64-2838

Fax: + 49 3641 64-2485

Email: [info.spectroscopy@zeiss.com](mailto:info.spectroscopy@zeiss.com)  
[www.zeiss.com/spectroscopy](http://www.zeiss.com/spectroscopy)