

The PlasCalc-2000 is part of the Mikropack line of thin film metrology systems provides real-time, in situ analysis of the optical emission spectra acquired during plasma processes. The system has all the tools necessary for monitoring and controlling a running process, with sophisticated algorithms for data acquisition and signal treatment.



### Applications

- » Multi stack etches and trenches
- » Film deposition
- » Plasma etching
- » Surface cleaning
- » Plasma chamber health control
- » Protection coating
- » Pulsed magnetron sputtering of crystalline aluminum coatings
- » Planarizing of blanket poly--silicon
- » Recess depth while plugs are being recessed
- » Control of abnormal process phenomena (pollution, discharge etc)

### Features

- » Sophisticated algorithms for data acquisition and signal treatment
- » Analog / Digital output and input capabilities
- » Recipe editor tool to easily and rapidly create an efficient process recipe by one click navigation to functions
- » Integrated formula editor for easy access to a full range of mathematical functions
- » Optional library of emission wavelengths for direct access to species identification
- » Wavelength editor for signal to noise optimization
- » Alarms to monitor other events during the run to detect process drifts
- » SpecLine software for peak finding and line identification

# Specifications

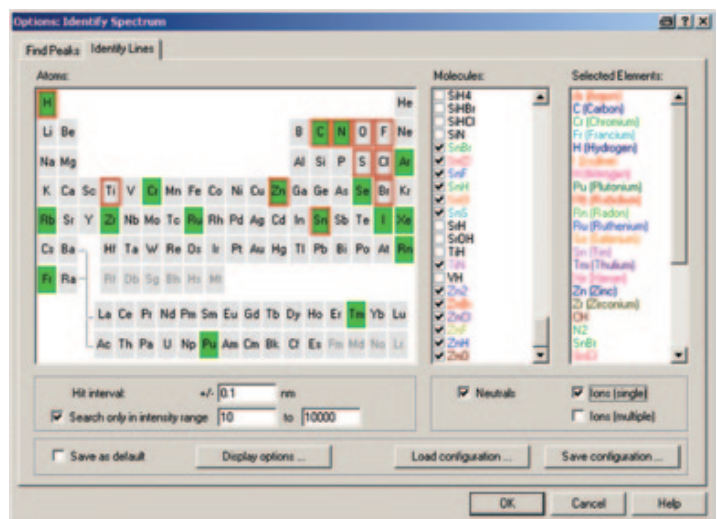
## PlasCalc-2000

OPTICAL	
Spectral range	200 - 1100 nm
Spectral resolution	1 nm FWHM
Fibre input connector	SMA905
I/O-D/A-converter	14 bit
PHYSICAL	
Dimensions	52 cm x 33 cm x 24 cm
Weight	3.9 kg
ELECTRONICS	
Power supply	12 V 1,25 A
Power requirements	90 - 240VAC 50/60 Hz
Digital Input/Output	8 x TTL /8 x TTL
Analog Output /voltage sign.	4 x [0 -10 V]
OTHER	
Operating temp./Humidity	5 - 35 °C/ 5- 95% without condensation
Markings	CE; VDI/VDE 0160 EN 61010



### SpecLine Software (Option)

Software for spectroscopy, astrophysics, plasma science or plasma processing. This tool supports and makes it easy to evaluate spectral data, i.e. finding specific lines in spectra, identifying unknown peaks, identify atomic lines and molecular bands or comparing data from different measurements in spectral data. Almost instantaneously peaks of lines and bands will be found using several powerful filter functions. Extensive data base for atoms and molecules included.



Mikropack Metrology Systems  
[www.oceanoptics.eu](http://www.oceanoptics.eu)  
[thinfilm@oceanoptics.eu](mailto:thinfilm@oceanoptics.eu)

**Ocean Optics Germany GmbH**  
**Thin Film Metrology Centre**

Maybachstrasse 11  
 73760 Ostfildern  
 Germany

T: +49 711 34 16 96-0

F: +49 711 34 16 96-85

