### IMPROVED SIGNAL CONDITIONERS

Opsens Solutions readout units are compatible with all SCBG sensors and are available in many different formats.



OEM CARD

OEM-type signal conditioner that offers a product designed for specific needs. Its compact size and modular assembly give OEM's the best in design flexibility.



### HANDHELD UNIT

Ruggedized to provide good mechanical protection against intensive handling in tough environments, these devices are compact and offer maximum portability with battery powered function.

# FIBER OPTIC SENSING SOLUTIONS

## RELIABLE **PLUG & FORGET** SOLUTIONS FOR THE SEMICON INDUSTRY



### MULTI-CHANNEL EQUIPMENT

Robust and stackable multi-channel signal conditioners offering a variety of interface and communication protocols such as serial, analog and even EtherCAT.



### MODULAR PLATFORM

Highly versatile, the CoreSens supports a broad range of fiber optic sensors and offers measurement sampling rate up to 1,000 Hz.

### OUTSTANDING FIBER OPTIC SENSING SOLUTIONS FOR DRY & WET ETCHING

### **KEY FEATURES**

- Ultra robust and reliable
- Total interchangeability of sensors
- Absolute sensor calibration free
- Specific design for ESC, shower head, and focus ring
- Response time in the order of the ms
- Up to 1000 Hz sampling rate
- From cryogenic to 350 °C

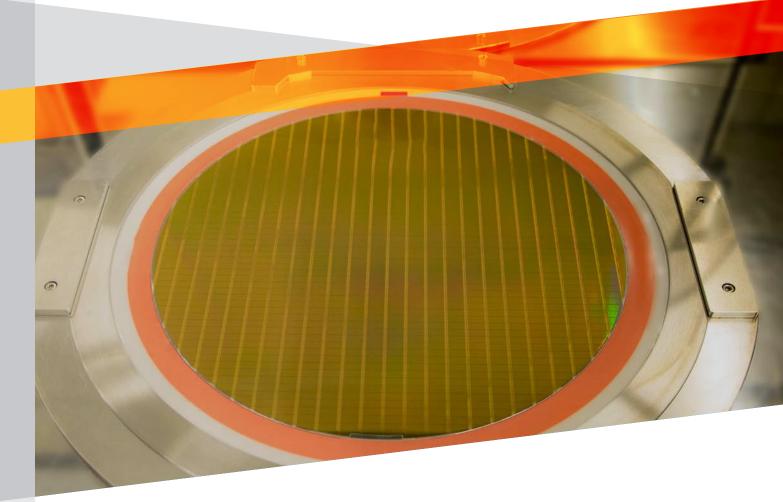
### TO LEARN MORE

+1.418.682.9996 info-solutions@opsens.com opsens-solutions.com



Enlightenment through smart measurements

319 Franquet Street, Suite 110 Quebec QC G1P-4R4 CANADA Opsens Solutions Inc. reserves the right to make any changes to the above specifications without prior n IMP0188 En Semicon Brochure\_Rev1.3 | Printed in Canada



## **OPSOILTIONS** Enlightenment through smart measurements

### **ROBUST INDUSTRIAL DESIGN**

Etching applications require robust and reliable sensors. Opsens products are designed with flexible sheathing materials capable of sustaining plasma vacuum conditions and temperatures up to 350° Celsius.

#### **ADVANTAGES**

- Very robust cable which could be wrapped around a finger
- No drift over time
- Robust packaging compatible with etching application
- Fast sampling rate up to **1000 Hz**

#### **BENEFITS**

- No downtime caused by sensor or cable replacement
- No more special handling procedure for fragile fiber optic components
- Sensors fit in any apparatus (shower head, ESC, and focus ring)
- PLUG & FORGET sensors
- Detect changes in temperature faster

### HASSLE FREE WITH TOTAL INTERCHANGEABILITY

The technology provides absolute temperature measuring devices: no gauge factor related to the sensor or associated to a specific readout unit.

Any sensor for any signal conditioner.

#### **ADVANTAGES**

- Sensors can be mixed and matched with any readout unit without specific calibration for a specific channel or for a specific temperature measuring range
- PLUG & PLAY feature. Calibration free. No gauge factor needed.
- Sensor to sensor consistency
- Simple and easy integration with fast **CONNECT & MEASURE** feature

### BENEFITS

- Greatly improve setup time and productivity
- Significantly reduce sensor inventory/management
- Simplify temperature sensing integration in etching equipment
- Save time & reduce cost of ownership



### **KEY FEATURES**

- Response time in the ms
- Sampling rate up to 1 kHz
- Max temperature of 350 °C
- Min temperature of -200 °C
- No calibration needed
- Total interchangeability
- Ultra robust design



## **STRONG EXPERTISE AND CAPABILITY**

With two ISO certified independent facilities and more than 40,000 square feet of space specifically designed to manufacture fiber optic sensors, Opsens production volume reaches thousands of units per month.





### **VERSATILE TECHNOLOGIES**

Opsens Solutions is also developing fiber optic pressure sensors for vacuum environment.





Opsens is a key player in the cardiovascular medical devices market with an innovative fiber optic pressure guidewire. Monthly production of these FDA approved sensors reaches 4,000 units.