### IMPROVED SIGNAL CONDITIONERS

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



#### COMPACT

The FieldSens<sup>w</sup> is a **compact and robust** multi-channel signal conditioner supports a broad range of fiber optic sensors and offers measurement sampling rate up to 250 Hz.



### 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.

### 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.



### 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



POLYTEC GmbH Tel: +49 (72 43) 604 1721

Polytec-Platz 1 - 7 D -7633 Fax: +49 (72 43) 6 99 44 E-Mail:

D -76337 Waldbronn GERMANY E-Mail: ot@polytec.de www.polytec.de

de

# FIBER OPTIC SENSING SOLUTIONS

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



## **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.