Opsens’ ODP-A fiber optic displacement sensor is designed to offer high precision in the most demanding environments. Combined with Opsens’ WLPI signal conditioning technology (US 7,259,862) and with the inherent advantages of fiber optics, the ODP-A delivers unprecedented repeatability, resolution and reliability in the most adverse conditions such as high level of EM, RF, MR and microwave field environments.

The standard model comes with 25 mm linear stroke length and with one micron resolution. Other stroke lengths are available upon request. The ODP-A is mounted in a water splash-proof aluminium housing and a dielectric composite housing is offered in option. A convenient wall-mount attachment and a shaft spring return allow easy installation of the sensor.

The ODP-A is compatible with all Opsens’ WLPI signal conditioners. This precise and robust sensor, available with different optical cables length is customizable according to customer specific applications or for OEM-type applications.

**Key Features**

- 25 mm linear stroke length standard
- Outstanding resolution
- Robust construction and water splash proof housing
- EMI/RFI and microwave immune
- Intrinsically safe
- Convenient wall mount attachment
- OEM-type and custom version

**Applications**

- EM, RF and microwave environments
- High voltage environments
- Nuclear and hazardous environments
- Automotive, robotic systems
- Aeronautic & aerospace applications
- Civil engineering and geotechnical applications
- Material science
- RF and microwave drying applications

**Description**

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### Specifications

**Linear stroke length**  
25 mm standard (other stroke lengths available upon request)

**Resolution**  
1 micron (based on 20 data samples averaging)

**Accuracy**  
0.2% F.S. (@ 25 °C)

**Repeatability**  
0.05% F.S.

**Operating temperature range**  
-40 to 85 °C (higher or lower temperature range available upon request)

**Operating humidity range**  
0-100 %

**EMI/RFI susceptibility**  
Complete immunity

**Construction material**  
Aluminium housing and stainless steel core (dielectric composite material available upon request)

**Load mechanism**  
Spring return for fully extended shaft at rest (spring load can be removed)

**Cable length**  
1.5 meter standard (other lengths available upon request)

**Optical connector**  
SC standard

**Signal conditioner compatibility**  
All Opsens WLPI signal conditioners

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*All specifications are subject to change without prior notifications*