FIBER OPTIC DISPLACEMENT SENSOR

MULTI-PURPOSE FIBER OPTIC DISPLACEMENT



KEY FEATURES

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



ODP-A

DESCRIPTION

Opsens Solutions' ODP-A fiber optic displacement sensor is designed to offer high precision in the most demanding environments. Combined with Opsens Solutions' WLPI signal conditioning technology (# 7,259,862) and with the inherent advantages of fiber optics, the ODP-A delivers unprecedented repeatability, resolution and reli-ability 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 Solutions' 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.

APPLICATIONS

- Civil engineering and geotechnical applications
- EM, RF and microwave environments
- Automotive, robotic systems
- High voltage environments

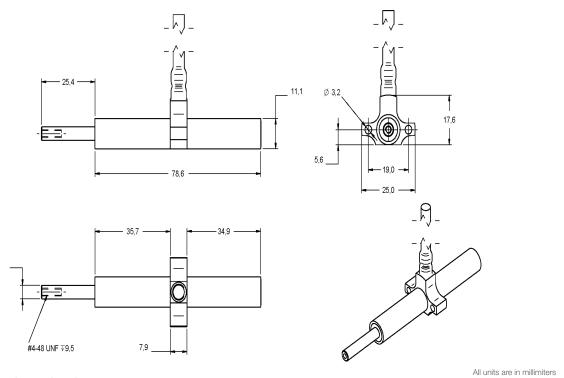
- Aeronautic & aerospace applications
- Material science
- Nuclear and hazardous environments
- RF and microwave drying applications



Opsens Solutions Inc. reserves the right to make any changes to the above specifications without prior notice. IMP0027 En ODP-A Rev1.8 | Printed in Canada

ODP-A

FIBER OPTIC DISPLACEMENT SENSOR



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
TEMPERATURES OPERATING 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)
OPTICAL CONNECTOR	SCA (Standard), LCA (Standard), other connector available on request
LOAD MECHANISM	Spring return for fully extended shaft at rest (spring load can be removed)
CABLE LENGTH	Up to 3 km (Sampling rate dependent, consult factory for more details)
	op to o thin (building rate asportability sorrout ractory for more actains)