

FBG Displacement Sensor (ALDS01 / ALDS02)

Alxenses's displacement sensors ALDS01 and ALDS02 are designed to monitor the extension and compression displacement respectively. Double FBGs are packaged inside the housing. One FBG is used of its strain sensitivity to monitor the displacement. Another FBG is used as temperature compensation. The sliding rod can move freely over a customized distance from 10mm to 80mm.

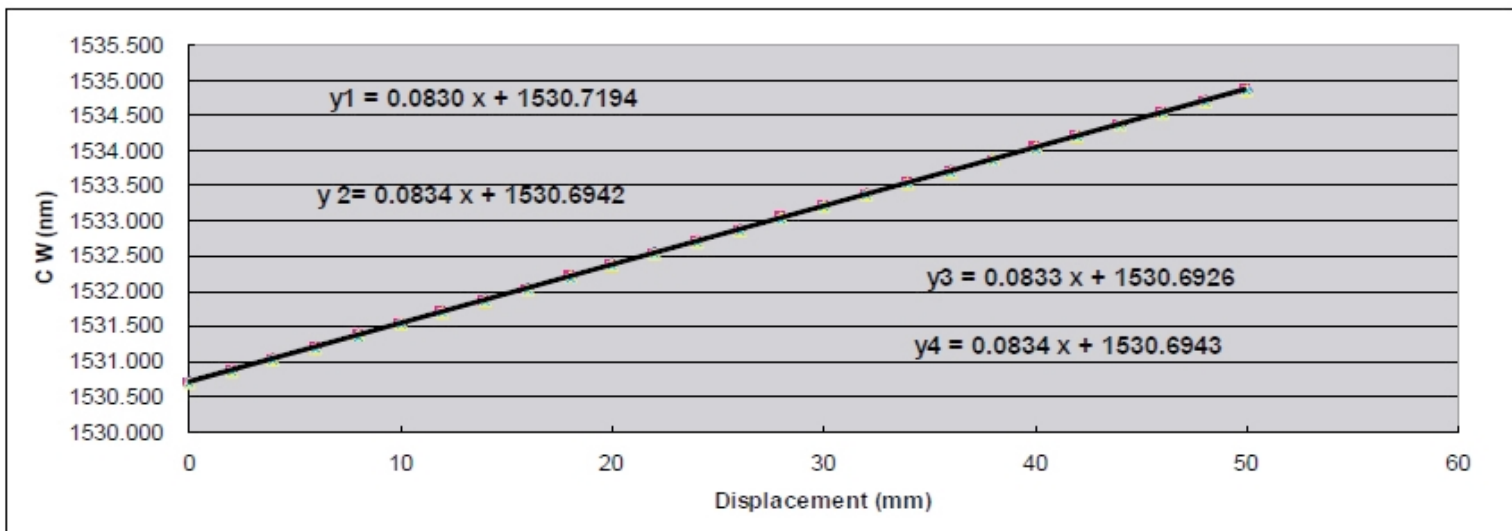
Features

- Two cables at both ends
- Flexible in cascading several displacement sensors in one array
- Customized distance
- High robust and high repeatability

Applications

- Positioning measurement
- Geological movement detection

Displacement Calibration



Dimension



FBG Displacement Sensor (ALDS01 / ALDS02)



Displacement Sensor ALDS01



Displacement Sensor ALDS02

SPECIFICATIONS

Displacement Sensor ALDS01 / ALDS02

| Parameters | Values | Units |
|------------------------|-----------|-------|
| Center Wavelength | 1510~1590 | nm |
| Displacement Range | 10~80 | mm |
| Resolution | 0.05% | mm |
| Displacement Accuracy | 1% | mm |
| Temperature Resolution | 0.1 | °C |
| Temperature Accuracy | 1 | °C |
| Operating Temperature | -20 ~ +85 | °C |
| Material | AlMg3 | -- |
| Connector | FC/APC | -- |