

# SPECIFICATION SHEET: OPTICAL DISPLACEMENT SENSOR NODE



## Physical Specifications

Dimensions (L x W X H)	105 x 105 x 64 mm
Total Mass	440g (approx.)
Housing Material	PC plastic body and lid cover with die cast aluminium base
Internal Protection Marking	IP66 / IP67 IP68 (1 m for 24 hours)
Mounting Options	M4 holes in bottom, Plates and brackets available for magnetic fixing, trackbed, stake and pole mounting, and many other applications
Operating Temperature Range	-10°C to +40°C (full functionality) -25°C to +70°C (temperature and tilt only)

## Internal Battery

Battery Type	Lithium Thionyl Chloride, non-rechargeable, D-cell
Nominal Voltage	3.6 V
Nominal Capacity	19000 mAh
Typical Battery Life	10 years at 1 hour reporting interval when using radio preset 1 8 years at 30 minute reporting interval when using radio preset 1

## Optical Sensor Specifications

Resolution	0.1 mm
Repeatability	±0.15 mm
Range	50 metres (natural surface) 100 metres (white target) 150 metres (reflecting target)
Laser Type	Class 2, 655nm (visible red)

## Tilt Sensor Specification

Resolution	0.0001° (0.00175 mm/m)
Repeatability (-IXH variant)	±0.0025° (±0.0436 mm/m)
Range	±90°

## Sampling and Reporting

Maximum Reporting Frequency	30 seconds
Sample Storage	Stores up to 40,000 sampling cycles in a circular buffer

## Certifications

- Tested to conformity with all the essential requirements of the Radio Equipment Directive 2014/53/EU and RoHS Directive 2011/65/EU
- FCC Grant of Equipment Authorization
- ACB ISSED Canada Certificate: 24373-LR3N
- RCM (Australia and New Zealand)