

# SPECIFICATION SHEET: CRACK SENSOR NODE



## Physical Specifications

<b>Dimensions</b>	120 x 105 x 64 mm
<b>Total Mass</b>	448g (approx.)
<b>Housing Material</b>	PC plastic body and lid cover with a die-cast aluminium base
<b>Internal Protection Marking</b>	IP66
<b>Mounting Options</b>	M4 holes in bottom, Plates and brackets available for magnetic fixing, trackbed, stake and pole mounting,
<b>Operating Temperature Range</b>	-40°C to +80°C

## Internal Battery

<b>Battery Type</b>	Lithium Thionyl Chloride, non-rechargeable, D-Cell
<b>Nominal Voltage</b>	3.6 V
<b>Nominal Capacity</b>	19000 mAh
<b>Typical Battery Life</b>	12 years at 30 minute reporting intervals

## Crack Sensor Interface

<b>Circuit Topology</b>	Voltage Divider
<b>Stimulus</b>	2.5 V, 100 mA max
<b>Resolution</b>	0.0015% of full scale
<b>Noise Level</b>	0.005% of full scale (typical peak to peak)
<b>Range (with internal antenna)</b>	Up to 12 km depending on the environment Trackbed: 1 km Tunnel: 2 km Urban: 2.3 km Line of Sight: 12 km

## Sampling & Reporting

<b>Maximum Reporting Frequency</b>	30 seconds
<b>Sample Storage</b>	Stores up to 75,000 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 ISED Canada Certificate: 24373-LR3N
- RCM (Australia and New Zealand)