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| Registration No. | 3224 |
| Title | WISENMESHNET Gateway; WISENMESHNET Dual Axis Standard Tilt Node; WISENMESHNET Dual Axis Mini Tilt Node; WISENMESHNET Vibrating Wire Interface Nodes (1 Channel); WISENMESHNET Vibrating Wire Interface Nodes (4 Channel); WISENMESHNET Vibrating Wire Inte |
| Status | Authorised For Use |
| Supersedes ProductID | N/A |
| Superseded By ProductID | 0 |
| Date Authorised for Use | 02 Jan 2016 |
| Primary Use | The system comprised of the products listed above. It is intended for use in structural monitoring of the assets that are subject to movement due to construction operations, or for management and monitoring of movement on existing assets. The system measures tilt of the sensor nodes and reports the measurements of tilt to the gateway (which communicates with the internet via an internal GPRS modem. 2.4GHz WiFi or RS232/485 cable connection). |
| Additional Info/KeyWords | Wireless Sensor Network, Infrastructure Monitoring, Partnership with SCCS Survery Ltd |
| Classification Hierarchy | Civil Deep Tube Tunnel |
| Manufactured By | Wisen Innovation (UK) Limited |

Requirements

| ReqID | Requirement | Status | Trial |
|-------|---|-----------|--------------------------|
| 982 | Product meets the requirements of LU Standard 1-085 for use in deep tube tunnels. | Satisfied | <input type="checkbox"/> |

Conditions

| Description | Linked To ReqID |
|--|-----------------|
| Head of Profession to agree suitability of use of product on Deep Tube Tunnel Assets | |
| Product must be installed by manufacturer trained personnel | |
| Gauge clearance checks T002/3 must be carried out on installation in a tunnel environment | |
| Product to be installed and maintained according to manufacturer's instructions unless alternative approach is designed and approved | |
| Products shall be positioned so as not to obscure signals or signs from train operators. | |
| An appropriate fixing must be designed and agreed with Head of Profession - Deep Tube Tunnels. | |
| Equipment must be decommissioned after use. | |
| Cable used with this system must be compliant with LU Standard 1-085 Fire Performance of Materials. | |

Evidence

| EvidenceText | EvidenceType | FileName | Linked To ReqID |
|--|---------------|---|-----------------|
| Wisen Innovation Product Specifications - V10.pdf | Specification | Wisen Innovation Product Specifications - V10.pdf | |
| WISENMESHNET® Smart Gateway User Manual 2014.08.06 - V8.pdf | User Guide | WISENMESHNET® Smart Gateway User Manual 2014.08.06 - V8.pdf | |
| WISENMESHNET® Dual-Axis Tilt Node 2014.08.06 - V8 | User Guide | WISENMESHNET® Dual-Axis Tilt Node 2014.08.06 - V8.pdf | |
| WISENMESHNET® VW Interface Node 2014.08.06 - V8.pdf | User Guide | WISENMESHNET® VW Interface Node 2014.08.06 - V8.pdf | |
| IP66 Rating Test Report English Version -SH14070018K02 | Test report | IP Rating Test Report English Version -SH14070018K02.pdf | |
| WISENMESHNET Product Calibration Datasheets, including a scanned copy of: a. WISENMESHNET Gateway b. WISENMESHNET Vibrating Wire Interface Node (1, 4, 8 Channel) c. WISENMESHNET Dual-Axis Tilt Node Note: Inspection test and related calibration test are carried out and recorded in this datasheet, this is done for each unit. | Other | WISENMESHNET Product Calibration Datasheets - 2014.9.7.rar | |
| Case Studies I Moorgate Station using WISENMESHNET System from Feb 2013 till present. | Other | Moorgate Station Project - Feb 2013 Till Now.rar | |

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| Case Study II WISENMESHNET Monitoring Project at London Bridge Station from Nov 2012 Till Present | Other | WISENMESHNET Monitoring Project at London Bridge Station.rar | |
| Trade Mark Certificate - WISENMESHNET WISENMESHNET Trade Mark Certificate - Madrid Agreement and Protocol | Other | WISENMESHNET Trade Mark Certificate - Madrid Agreement and Protocol.pdf | |
| CE: SH14070018A01_SAFETY Report_Gateway | Test report | SH14070018A01_SAFETY Report_Gateway.pdf | |
| CE: SH14070018A02_SAFETY Report_Tilt Node | Test report | SH14070018A02_SAFETY Report_Tilt Node.pdf | |
| CE: SH14070018A03_SAFETY Report_VW Interface Node | Test report | SH14070018A03_SAFETY Report_VW Interface Node.pdf | |
| CE: SH14070018A04_SAFETY EN60950-22 Report_Gateway | Test report | SH14070018A04_SAFETY EN60950-22 Report_Gateway.pdf | |
| CE: SH14070018A05_SAFETY EN60950-22 Report_Tilt Node | Test report | SH14070018A05_SAFETY EN60950-22 Report_Tilt Node.pdf | |
| CE: SH14070018A06_CE SAFETY EN60950-22 Report_Interface Node | Test report | SH14070018A06_CE SAFETY EN60950-22 Report_Interface Node.pdf | |
| CE: SH14070018E01_CE EMC_gateway | Test report | SH14070018E01_CE EMC_gateway.pdf | |
| CE: SH14070018E02_CE EMC_tilt node | Test report | SH14070018E02_CE EMC_tilt node.pdf | |
| CE: SH14070018E03_CE EMC_vw interface node | Test report | SH14070018E03_CE EMC_vw interface node.pdf | |
| CE: SH14070018W01_CE_Gateway | Test report | SH14070018W01_CE_Gateway.pdf | |
| CE: SH14070018W03_CE_Tilt node | Test report | SH14070018W03_CE_Tilt node.pdf | |
| CE: SH14070018W02_CE_VW interface | Test report | SH14070018W02_CE_VW interface.pdf | |
| WISENMESHNET® System Sketch | Sketch | WISENMESHNET System Sketch - 2015.02.01.pdf | |
| Report on Electromagnetic Compatibility | Test report | Report on Electromagnetic Compatibility Tes - by DB Technology.pdf | |
| Electromagnetic Compatibility Test Summary 1 | Test report | T4585_Summary_121217.pdf | |
| Electromagnetic Compatibility Test Summary 2 | Test report | T4585_Summary_121220.pdf | |
| Technical Report on Enclosure and Paint Materials | Consultation | LUL Approval - Technical Report on Enclosure and Paint Materials - Wisen Innovation - 2015.07.24.jpg.jpg | |
| Fire Performance Combustible Material Document | Consultation | LUL Approval Application ID 3224 - Fire Test Document - 21.11.2015.pdf | |
| LU Signalling Approval File Note | Consultation | LU Signalling Approval File Note.pdf | |
| LU EMC Engineer Approval Email | Consultation | LU EMC Approval Email.pdf | |

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