# WiSenMeshWAN:
# Interface Node Analog
## Wireless Monitoring System



This internally powered sensor node allows intergration connection with analog sensors to detect the voltage readout. With selectable input ranges (0 to 5.0 V) that can be read with very high accuracy (±0.05% FS) and resolution (0.18mV).

The nodes automatically power and sample the connected devices at a required intervals and collate the analog voltage data.

The node has a single channel for sensor input (upto 5 VDC), an integrated internal temperature sensor and wireless mesh radio transmitter via the external antenna.

The battery lifespan is up to 5 years at hourly readings.

WiSenMeshWAN nodes communicate via bespoke encrypted mesh radio technology can be up to 1.5km from each other or the SmartGateway. The sensors mesh together and automatically form a network relaying data off each other (up to 6 sub mesh levels of data hop) and back to a central data hub called a SmartGateway which contains the data logging functions, radio mesh control systems and external communication to the WiSen cloud based datacentre or local hosted system.

## Features

- WiSenMeshWAN Node
- Analog Interface
- 1-channel input device
- Intelligent node/repeater
- 1 second to 1 hour variable readings
- End user configurable
- IP66
- Battery life up to 5 years

# WiSenMeshWAN: Interface Node Analog

**BASICS**

| | |
|---|---|
| Battery Power | 1 xER34615 Battery |
| Accuracy Stop Voltage | 2.7VDC |
| Mesh Stop Voltage | 2.1VDC |
| Battery Connection | Standard Aluminium Battery Holder |
| Working Current (DC) | Max. 210mA |
| Local Storage | Min. 450 Messages |
| L x W x H | 100mm x 100mm x 60mm |
| Weight | 0.60kg |
| Cable Gland | 1 x EMC-CMA12 for external sensor connection |
| Wire Connection | Spring type wiring terminal |

**EXTERNAL CONNECTED SENSOR**

| | | |
|---|---|---|
| Sensor Type | 3rd party device, Maximum cable length 1m | |
| | Signal Output Range (0 to Vcc_Out) | Power Input Voltage (Vcc_Out) @max. 100mA |
| | 0-1.8V | 1.8V±0.05V |
| | 0-2.5V | 2.5V±0.05V |
| | 0-3.3V | 3.3V±0.05V |
| | 0-5.0V | 5.0V±0.05V |
| No. of Inputs | 1 Channel | |
| Sensor Connection | Type of 3 wires: V+, Line, GND. | |
| Accuracy | 0.05% F.S. | |
| Resolution | 0.18mV | |

**STANDARD SYSTEM PARAMETER**

| | |
|---|---|
| Temperature | Range: -40 ~ 85°C, Accuracy: ±1°C,  Precision: 0.1°C |
| Voltage | Accuracy: ±0.1V |

**WIRELESS SENSOR NETWORK INTERFACE**

| | |
|---|---|
| Protocol | WiSenMeshWAN® proprietary radio encryption |

**INDUSTRIAL STANDARD**

| | |
|---|---|
| Casing and Painting Materials | Aluminium-Alloy & Epoxy Polyester Powder Coating |
| IP Rating | IP66 |
| Operating Temperature | -40 ~ +85°C |
| Certificates | CE, FCC, ACMA, RCM, ANATEL |

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- when it has to be **right**

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