Datasheet

Wireless Battery-Operated Rotational Movement Detector

SKU: IMAG163010-REED-ROT

Category: Sensors

Description

Industrial Wireless Battery-Operated Magnetic Proximity (Reed) Switch

The iQunet proximity switch (reed) sensor is a small battery-operated device that collects continuously data and transmits wireless the gathered data on free adjustable time intervals.

The magnetically actuated internal reed switch monitors the presence of machine components. The normally open switch is closed in the presence of a magnet. The sensor is especially designed to wireless monitor on adjustable intervals rotation speed (RPM) of rotating equipment. The sensor collects simultaneously temperature data. The sensor is powered by 2 standard CR2032 coin cells (included) which assures function for several years in standard operation mode.

The sensor makes a network direct to the central base station node or via the optional repeater. Sensor data is visualized in the iQunet sensor dashboard on the iQunet data server, offering temperature graphs, RPM readings, counter reading, etc.

Used in: monitoring wireless rotation speed of machinery, open or close status of e.g. doors, guards, etc., monitoring of machine cycles, ...

Technical specification:

- **Physical:**
  - Dimensions (mm): 57 x 47 x 14
  - Weight: 35g
  - Case material: thermoplastic
  - Sealing: IP65 (IP68 available 2019)
- **Installation:** M3 screws (epoxy adhesive for permanent mount)
- **Operating temperature:** -20°C to +70°C
- **Recommended storage temperature:** +30°C maximum
- **Certifications:**
  - CE
- **Wireless communications range:** up to 50 m typically in plant (actual range depends on specific site topology and device placement)
- **Power supply:** 2 x 3V (replaceable CR2032 battery)
- **Measurements:**
  - Count range: 0 to 2³² pulses
  - RPM range: 0 to 1500 rpm
- **Temperature sensor on board:** yes
- **Start data acquisition:**
  - Manual trigger (REC button in sensor dashboard)
  - Automatic measurements (programmable time interval)
  - Conditional automatic measurements (programmable threshold level)
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Technical specification (continued):

- **Communication protocols:**
  - Subscribe to sensor parameters and data with OPC UA (setting flag available in 2019)
  - Control sensor settings and start measurements using GraphQL mutations
  - Read out sensor parameters and data using GraphQL queries
- **Data storage:** on iQunet data server