

SIGFOX™ ALARM REPORT SENSOR



SIGFOX™ ALARM REPORT SENSOR transforms any dry contact sensor into a remote wireless sensor that monitors industrial equipment status and alarms

APPLICATIONS

- Industry – Process control and automation, power line defect detection
- Water Treatment, Agriculture Irrigation –water valves and pumps, alarm status...
- Food production & distribution – monitor cooling equipment, fridge door contact status, alarms status...
- HVAC & building management – monitor air valves and pumps, heaters/coolers, alarm status, human presence, doors contact status, lights...

BENEFITS & KEY FEATURES

- SIGFOX™
- Easy to use and deploy
- 15 years battery autonomy (1 state change report per day)
- IP55

QUALITY & RELIABILITY

- RoHS compliant
- CE compliant



The ALARM REPORT SENSOR from nke Watteco is a narrow band, long range, low power consumption, high performance and high quality , SIGFOX™ device transforming any dry contact sensor into a wireless alarm sensor that instantaneously transmits any input state change.

If the input state of the ALARM REPORT SENSOR changes more than one time within a time interval limit set by the user, it instantaneously reports an alarm to notify that the monitored equipment is not operating properly.

The ALARM REPORT SENSOR is specifically designed for users looking to remotely monitor any I/O signals from industrial equipment such as pumps, fans, valves, heaters, coolers, motors, generators, lights, door (ON/OFF status, alarms, ...)

The sensor is easy to use, deploy and maintain:

- NFC tag for identification (Part number, serial number and manufacturing number)
- Magnetic switch to activate/de-activate the sensor

Powered through a 3.6V/3600mAh Lithium battery, it allows an autonomy up to 15 years when reporting one I/O state change per day.

The configuration of the transmitter can be done at factory or on-site allowing the choice information frame radio-transmission periodicity and alarms threshold values.

NKE WATTECO, YOUR PARTNER IN SMART SENSORS & ACTUATORS

We are a European leader in designing and manufacturing highly reliable and low power consumption smart sensors, actuators and multiprotocol remote data solutions.

TECHNICAL CHARACTERISTICS

RF TRANSCEIVER	
Frequency (MHz)	EU: 868-870
Transmit Power (dBm)	+14
Receiver Sensitivity (dBm)	-126
FIRMWARE	
Protocol	SIGFOX™
Data encryption	AES128
Information frame transmission cycles	From 0 day to 30 days in 1day step
Alarm detection	Always active
I/O configuration	1: Normally Open / 0: Normally closed
Alarm level	Battery level: 0,1V to 3,6V by 0,1V step Minimum time between 2 consecutives state change: from 1min to 240min by 1 min step
INPUT CHARACTERISTICS	
Number of inputs	1
Impedance (MΩ)	>1
Capacitance (nF)	1; typical
Voltage (V)	0 - 32
Current (μA)	3.5
Frequency (Hz)	1 - 100
POWER	
Power supply	3,6V / 3600mAh lithium battery
Autonomy within a +10°C to +25°C temperature range	15 years: 1 input state change reporting per day
INTERFACE	
NFC Tag	Part number, serial number and manufacturing number
Buzzer Indicator	Network pairing / unpairing & configuration
Magnetic Switch	ON/OFF
ALARMS	
ON/OFF	Transmitted instantaneously
Low battery	Transmitted at information frame rate
Input state change	Transmitted instantaneously
Monitored device/apparatus	Transmitted instantaneously when 2 consecutives state change are reported within the time interval limit. The time between 2 consecutives state change is configurable.
MECHANICAL FEATURES	
Dimension (mm)	84x82x85
IP Class	IP55
ENVIRONMENTAL	
Operating temperature (°C)	-20 / +50
Storage temperature (°C)	-10 / +30
DIRECTIVES & STANDARD	
EN, 61000-4-2 EN 300-220-1 V2-4-1, EN 301 489 V1-6-1 CE, RoHS recommendation compliant	



ORDERING INFORMATION

REFERENCE	DESCRIPTION
50-09-046	SIGFOX™ ALARM REPORT SENSOR