

CONTACT SENSOR

Monitor openings and closing events.



ACT

Control equipment in response to a change of state.
Activate or restart equipment remotely at any time.



ALERT

Alert on events:

- report faults,
- control access, detect intrusion,
- Prevent beyond a certain number of openings / closings



MONITOR

- open / close status of objects (doors/ windows,...)
- the number of events over a period
- the time spent in the open or closed state

Additional features:



- Four configurable digital inputs/outputs:
 - Control an output based on the change in state of an input
 - Remote and in near-real time control of an output - LoRaWAN Class C
 - Track the time spent in a given state
- Data transmission modes: periodic and/or event-triggered
- Local and remote product configuration



Detect an intrusion (technical room, server room, hatches, windows...).



Know the time spent in an open state for a refrigerator.



Detect the opening of a smoke extraction hatch.

TECHNICAL SPECIFICATIONS



CONTACT-SENSOR

Current versions and associated part number

LoRaWAN	EU863-870	ARF8170ARA-B01
	US902-928	ARF8170BRA-B01
	AU915-928	ARF8170IRA-B01
	AS923	ARF8170JRA-B01

General specifications

Weight	128g (battery included)
Dimensions	132 x 62 x 34 mm
Enclosure	IP68, EMERGE™ PC 8731HH grey resin (housing), EMERGE™ PC8430-15 transparent resin (base)
Mounting	DIN rail, tube, wall, collar
Battery Type	Battery power: replaceable battery (4000 mAh) External power supply (not supplied): input range 4.5 - 6.5V - Max current 200mA USB power supply: supply voltage 5V nominal - Max current 200mA
Recommended operating conditions with battery supply	-25°C / +70°C ; 0 à 85% RH (non-condensing)

Device configuration

Local device configuration	IoT Configurator (Windows/Android)
Remote device configuration	Downlink via the network or via the KARE platform
Configuration and firmware update over-the-air	KARE+ compatible (only for LoRaWAN EU868)
Security	PIN/PUK code protection

INPUTS		OUTPUTS	
Number	up to 4 by configuration	Number	up to 4 by configuration
Voltage	0 - 24 V	Voltage	0 - 24 V
Equivalent input resistance	500 kΩ	Recommended dissipation max current	150 mA
Input frequency	10 Hz	Output frequency	10 Hz

PROXIMITY SENSOR

Detection	Magnetic switch
Cable Length	≈ 1.2 meter
Dimension	14 x 38 x 8.7 mm
Casing	IP67
Max distance between the 2 magnets for detection	15 mm
Operating temperature	-10°C to +85°C



TECHNICAL SPECIFICATIONS



LoRaWAN CONTACT-SENSOR

Zone	EU863-870 Mhz	US902-928 Mhz	AS923-1 Mhz	AU915-928 Mhz
Part number	ARF8170ARA-B01	ARF8170BRA-B01	ARF8170JRA-B01	ARF8170IRA-B01
Autonomy				
Expected Battery Life 1 transmission/4 hours, 4 inputs in default «open» state and 100 events per day	SF7: > 15 years SF12: > 15 years			
Radio/Wireless features				
LoRaWAN spec.	1.0.4			
Wireless Security	AES-128 data encryption			
Class	Class A and Class C (if external power supply connected)			
Supported LoRaWAN features	OTAA, ABP, ADR, adaptive channel setup			
Data time-stamping	EPOCH 2013 format (can be activated)	-	-	-
Joining phase	Can be customised (number of attempts, time between attempts), remote join re-launch			
Network quality test	Performed automatically when the product starts up (via LEDs)			-
RF transmit power	+ 14 dBm	+ 20 dBm	+ 14 dBm	+ 20 dBm
Regulations and certifications				
Standard	Directive 2014/53/UE (RED)	US: FCC- Title 47 CFR Part 15 Canada: RSS-247 Issue 2	AS/NZS 4268	AS/NZS 4268

