Technical parameters	AirSF-100S	AirSF-100L	AirSF-100NB
Power supply			
Battery power:	1x CR123A battery		
Battery life:	approx. 2 years (depending on frequency of use)		
Setting			
Alarm Detection:	message to the server, vibration, optical and audible alarm		
Battery status view:	message to the server		
DIP switch:	Position 1: turn off sound signal Position 2: turn off mechanical signal Position 3: turn off optical signal		
Acoustic signal:	greater than 85 dB		
Detection			
Sensor:	contacts for flooding		
Detection principle:	contact between the sensor sensed liquid		
Response Time:	2 s after connecting the scanning contacts		
Measurement accuracy:	99.8 %		
Sensitivity:	in the range 0.03 - 20 kΩ		
Indication			
- red LED:	broadcast, alarm		
Communication			
Protocol:	Sigfox	LoRa	NB-IoT
Transmitter frequency:	RCZ1 868 MHz	868 MHz	LTE Cat NB1*
Range in open space:	Approx. 50 km**	Approx. 10 km**	Approx. 30 km**
Other parameters			
Working temperature:	0…+50°C (Pay attention to the operating temperature of batteries)		
Storage temperature:	-30…+70°C		
Operation position:	capture contacts for flooding downwards		
Mounting:	loose		
Protection degree:	IP68		
Dimension:	Ø 89 x 23 mm		
Weight:	25 g (without battery)		

* Multiple frequency bands of B1 / B3 / B5 / B8 / B20 / B28
** Depending on network coverage

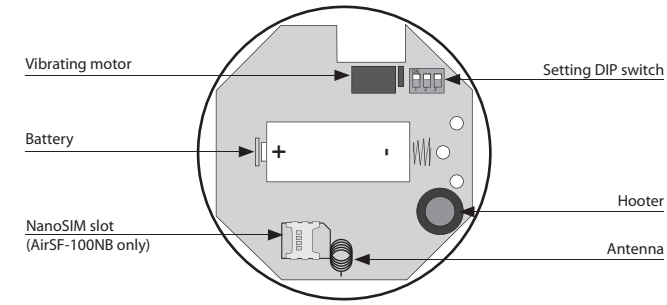
Function

When the scanning contact is connected, the detector sends the data message and starts the set alarm.

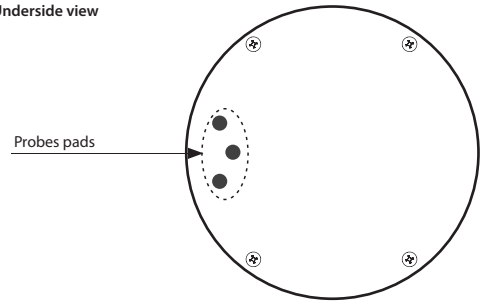
The signalling type can be set by the DIP switch.

- The flood detector is used to detect water leakage - the activation occurs the moment the flooding of the contacts located on the underside of the detector occurs.
- Provides a quick solution to learn about unwanted flooding in your bathroom or kitchen that you can react too immediately.
- With a wireless Sigfox / LoRa / NB-IoT communication network the device can be immediately put in the desired location and run immediately.
- Anti-sabotage function - the detector contains a motion sensor and sends a message to the server during any unauthorized manipulation.
- Flood detection is signalled by vibration, optical and acoustic signalling. In the case of water detection, data is sent to the server, ...
- Data is sent to the server from which it can be subsequently displayed as a smartphone, application, or Cloud notification.
- Anti-sabotage: If access to the device is unauthorized, a message is immediately sent to the server.
- Power supply: 1x CR123A battery life approx. 2 years (depending on frequency of use).

Device description



Underside view



Conductivity of liquids

Liquids suitable for detection	
Type of liquid	**Resistivity [Ωcm]***
Drinking water	5-10 kΩ
Well water	2-5 kΩ
River water	2-15 kΩ
Rain water	15-25 kΩ
Waste water	0.5-2 kΩ
Seawater	~0.03 kΩ
Salt water	~2.2 kΩ
Natural / hard water	~5 kΩ
Chlorinated water	~5 kΩ
Condensed water	~18 kΩ
Milk	~1 kΩ
Milk serum	~1 kΩ
Fruit juices	~1 kΩ
Vegetable Juices	~1 kΩ
Broths	~1 kΩ
Wine	~2.2 kΩ
Beer	~2.2 kΩ
Coffee	~2.2 kΩ
Soap toam	~18 kΩ

Inadmissible liquids
Demineralised water
Deionised water
Bourbon
Gasoline
Oil
Liquid gases
Paraffin
Ethylene glycol
Paints
High alcohol-content liquids

* Resistivity characterizes the local conductivity or resistive properties of materials which conduct electric current.