

SIGFOX™ FLASH'O



FLASH'O is a SIGFOX™ meter interface radio transmitting the accumulated flash LED numbers from any pulse meters: water, gas, electricity, energy.

APPLICATIONS

- Wireless AMR – Smart metering
- Infrastructure: all meters with flash LED interface can be integrated quickly and cost-effectively into a SIGFOX™ network without expensive and time-consuming cabling.

BENEFITS & KEY FEATURES

- SIGFOX™
- Easy to use and deploy
- Data compression for batch report
- IP55
- Up to 12 years autonomy
- Up to 250 pulses/second Flash LED rate counting and accumulation

QUALITY & RELIABILITY

- CE Compliant
- RoHS compliant
- Radio-equipment directive 2014/53/UE



The SIGFOX™ FLASH'O from nke Watteco. is a long range, low power consumption, high performance and high quality sensor. It operates with any commercial electronic meter products equipped with a blinking LED and provides connection to the SIGFOX™ wireless network.

Flash'O counts and accumulates the number of LED flashes that occurred since it has been commissioned. Based on the Impulsions per kWh or Wh indicated on the meter, the energy and power consumption can be computed.

The optical probe is easily attached either by magnets or by velcro. Cable-length is approximately 0.5m.




The accumulated number of flashes can be locally stored, concatenated and compressed. This unique batch mechanism significantly reduce the amount of data transmission for demanding applications such as load curve and drastically increase the autonomy.

Powered through a 3.6V lithium battery, in data compression mode, the estimated autonomy is up to 12 years when transmitting data one time per day and up to 8 years when reporting data one time per hour.

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
Measurement cycles	From 1h to 48h in 1h step
Measurement frame transmission cycles	From 2h to 48h in 1h step
Information frame transmission cycles	From 0 day to 30 days in 1day step
Data compression	yes (differential coding) or no
Alarm detection	yes or no
Alarm level	Battery level: 0,1V to 3,6V by 0,1V step
LED SENSOR	
Flash rate	Supports any meters LED flashing up to 250 pulses per second Note that autonomy is reduced at max. flash rate.
POWER	
Power supply	3,6V / 3600mAh 3,6V lithium battery
Autonomy within a +10°C to +25°C temperature range	>12 years in data compression mode when transmitting 1 time per day >8 years in data compression when transmitting 1 time per hour
INTERFACE	
LED Indicator	3 LEDs for Configuration and Network pairing
Magnetic Switch	Reset, ON/OFF
MECHANICAL FEATURES	
Dimension (mm)	84x82x85
IP Class	IP55
Mounting	Optical probe attachment either by magnets or by Velcro Cable-length is approx. 0.5m
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 and RoHS recommendation compliant	  

ORDERING INFORMATION

REFERENCE	MODEL DESCRIPTION
50-09-072	FLASH'O with LED sensor mounted in factory with 0.5m cable-length