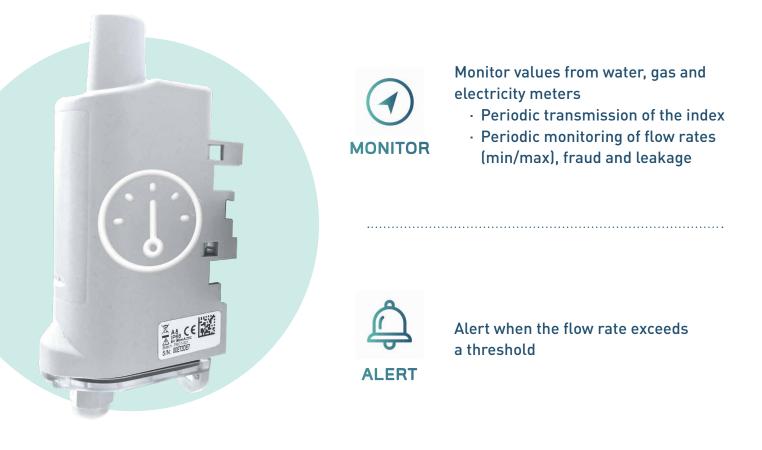


PULSE IP68



Make all your meters or pulse output equipments communicate.



Additional features:

- Periodic and/or event mode
- Autonomy optimization: historization
- Accessibility of the data: redundancy
- Error or Default management: Hardware error, configuration
- inconsistancy and low battery alert
 - Timestamp of the frame (LoRaWAN)
 - Network Quality Test at start-up (LoRaWAN)



Monitoring energy consumption in a building (water, electricity, etc.).



Count the number of cycles of an equipment to anticipate its maintenance.





LoRa Alliance Certified

PULSE LoRaWAN ARF8230ABA | Sigfox ARF8230CBA

Dimensions 132 x 62 x 34 mm Enclosure IP68, EMERGE™ PC 8731HH grey resin (casing), EMERGE™ PC 8430-15 transparent resin (sole) Mounting DIN Rail, Tube, Wall, Collar Operating conditions Temperature -25°C / +70°C Humidity Humidity 0 to 85% RH (non-condensing) Device Power Supply Eatery Type Battery Type 1 connectorized battery pack Depending on configuration Eg: Expected Battery Life Logging with 1 index / hour and 1 send / 4 hours (6 frames / day), 10,000 pulses and Pull-Up disabled: 5.3 years in Sigfox >10 years in LoRa SF12 >10 years in LoRa SF7 Device configuration IoT Configurator Configuration and firmware up- KARE+ compatible date from the air Downlink through network or through the KARE platform Security PIN/PUK Code protection Radio/Wireless Class A Supported LoRaWAN features OTAA, ABP, ADR, adaptive channel setup RF transmit power 14 dBm Sensitivity -132 dBm LoRaWAN (GSF12 <-122 dBm Sigfox	Mechanical specifications		
EnclosureIP68, EMERGE™ PC 8731HH grey resin (casing), EMERGE™ PC 8430-15 transparent resin (sole)MountingDIN Rail, Tube, Wall, CollarOperating conditionsTemperature-25°C / +70°CHumidity0 to 85% RH (non-condensing)Device Power SupplyBattery Type1 connectorized battery packExpected Battery LifeDepending on configuration Eg: Logging with 1 index / hour and 1 send / 4 hours (6 frames / day), 10,000 pulses and Pult-Up disabled: 5.3 years in Sigfox I >10 years in LoRa SF12 I >10 years in LoRa SF7Device configurationIoT ConfiguratorConfiguration and firmware up- date from the airKARE+ compatibleRemote device configurationDownlink through network or through the KARE platformSecurityPIN/PUK Code protectionRadio/WirelessClass ASupported regionsLoRaWAN EU863-870 / Sigfox RC1Uireless SecurityAES-128 data encryption (LoRaWAN only)LoRaWAN ClassClass ASupported LoRaWAN featuresOTAA, ABP, ADR, adaptive channel setupRF transmit power14 dBmSensitivity-132 dBm LoRaWAN (GSF12 <-122 dBm Sigfox	Weight	107.2 g (battery included)	
Enclosure8430-15 transparent resin [sole]MountingDIN Rail, Tube, Wall, CollarOperating conditionsTemperature-25°C / +70°CHumidity0 to 85% RH (non-condensing)Device Power SupplyBattery Type1 connectorized battery packDepending on configuration Eg: Expected Battery LifeDepending on configuration Eg: Logging with 1 index / hour and 1 send / 4 hours [6 frames / day], 10,000 putses and Pull-Up disabled: 5.3 years in Sigfox >10 years in LoRa SF12 >10 years in LoRa SF7Device configurationIoT ConfiguratorConfiguration and firmware up- date from the airKARE+ compatibleRemote device configurationDownlink through network or through the KARE platformSecurityPIN/PUK Code protectionRadio/WirelessClass ASupported regionsLoRaWAN EU863-870 / Sigfox RC1Wireless SecurityAES-128 data encryption [LoRaWAN only]LoRaWAN ClassClass ASupported LoRaWAN featuresOTAA, ABP, ADR, adaptive channel setupRF transmit power14 dBmSensitivity-132 dBm LoRaWAN (GSF12 <-122 dBm Sigfox	Dimensions	132 x 62 x 34 mm	
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Battery Type1 connectorized battery packBattery Type1 connectorized battery packExpected Battery LifeDepending on configuration Eg: Logging with 1 index / hour and 1 send / 4 hours (6 frames / day), 10,000 pulses and Pull-Up disabled: 5.3 years in Sigfox >10 years in LoRa SF12 >10 years in LoRa SF7Device configurationIoT ConfiguratorLocal device configurationIoT ConfiguratorConfiguration and firmware up- date from the airKARE+ compatibleRemote device configurationDownlink through network or through the KARE platformSecurityPIN/PUK Code protectionRadio/WirelessLoRaWAN EU863-870 / Sigfox RC1Wireless SecurityAES-128 data encryption (LoRaWAN only)LoRaWAN ClassClass ASupported LoRaWAN featuresOTAA, ABP, ADR, adaptive channel setupRF transmit power14 dBmSensitivity-132 dBm LoRaWAN (@SF12 <-122 dBm Sigfox	Humidity	0 to 85% RH (non-condensing)	
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SecurityPIN/PUK Code protectionRadio/WirelessLoRaWAN EU863-870 / Sigfox RC1Supported regionsLoRaWAN EU863-870 / Sigfox RC1Wireless SecurityAES-128 data encryption (LoRaWAN only)LoRaWAN ClassClass ASupported LoRaWAN featuresOTAA, ABP, ADR, adaptive channel setupRF transmit power14 dBmSensitivity-132 dBm LoRaWAN @SF12 <-122 dBm Sigfox		KARE+ compatible	
Radio/WirelessSupported regionsLoRaWAN EU863-870 / Sigfox RC1Wireless SecurityAES-128 data encryption (LoRaWAN only)LoRaWAN ClassClass ASupported LoRaWAN featuresOTAA, ABP, ADR, adaptive channel setupRF transmit power14 dBmSensitivity-132 dBm LoRaWAN @SF12 <-122 dBm Sigfox	Remote device configuration	Downlink through network or through the KARE platform	
Supported regionsLoRaWAN EU863-870 / Sigfox RC1Wireless SecurityAES-128 data encryption (LoRaWAN only)LoRaWAN ClassClass ASupported LoRaWAN featuresOTAA, ABP, ADR, adaptive channel setupRF transmit power14 dBmSensitivity-132 dBm LoRaWAN @SF12 <-122 dBm Sigfox	Security	PIN/PUK Code protection	
Wireless SecurityAES-128 data encryption (LoRaWAN only)LoRaWAN ClassClass ASupported LoRaWAN featuresOTAA, ABP, ADR, adaptive channel setupRF transmit power14 dBmSensitivity-132 dBm LoRaWAN @SF12 <-122 dBm Sigfox	Radio/Wireless		
LoRaWAN Class Class A Supported LoRaWAN features OTAA, ABP, ADR, adaptive channel setup RF transmit power 14 dBm Sensitivity -132 dBm LoRaWAN @SF12 <-122 dBm Sigfox	Supported regions	LoRaWAN EU863-870 / Sigfox RC1	
Supported LoRaWAN featuresOTAA, ABP, ADR, adaptive channel setupRF transmit power14 dBmSensitivity-132 dBm LoRaWAN @SF12 <-122 dBm Sigfox	Wireless Security	AES-128 data encryption (LoRaWAN only)	
RF transmit power 14 dBm Sensitivity -132 dBm LoRaWAN @SF12 <-122 dBm Sigfox	LoRaWAN Class	Class A	
Sensitivity-132 dBm LoRaWAN @SF12 <-122 dBm SigfoxRegulations and certifications	Supported LoRaWAN features	OTAA, ABP, ADR, adaptive channel setup	
<pre>Sensitivity <-122 dBm Sigfox Regulations and certifications</pre>	RF transmit power	14 dBm	
	Sensitivity		
Standard Directive 2014/53/UE (RED)	Regulations and certifications		
	Standard	Directive 2014/53/UE (RED)	

Impulse input	
Number of channels	1 or 2 channels configurable (eg: 1 counter with 5 wires or 2 coun- ters with 3 wires)
Equivalent input pull-up	180 kΩ (water), 47 kΩ (gas)
Input frequency	<100 Hz

BUNDLE	LoRaWAN	Sigfox
PULSE 2 cables of 3 wires CBL	ARF8230ABA-CBL2	ARF8230CBA-CBL2

