## **H**holosys



## **NB-IoT PulseReader P1-N**

Holosys NB-IoT PulseReader **P1-N** is a module used for automated collection of consumption data from various types of utility meters (water, gas, electricity, heating). The device is capable of reading meters equipped with pulse outputs. Collected data is then transmitted through the NB-IoT network that has the advantage of strong signal coverage and enables simple infrastructure, easy maintenance and reliable data transfer for AMR scenarios.



LTE Cat NB1
- band B20
(others on demand)



Compatible with utility meters that have pulse outputs



Local and remote device configuration



Tamper detection (manipulation alarm)

- Battery life time: up to 10 years (depending on device configuration and network radio signal quality)
- Protection type: IP68
- Operating temperature: -20°C ... 80°C
- Adjustable and pseudorandom measurement delivery sending interval in order to avoid network congestion
- Adjustable periodic interval of measurement sampling
  - Embedded Real-Time Clock (RTC)
- KEY FEATURES
- Delivering readouts to the Holosys
   NB-IoT Cloud from which the data is forwarded to user or third party systems
  - Tamper detection (manipulation alarm)
    - Guaranteed measurement delivery even in the event of network failure (the device stores up to 100 readouts internally and delivers them once the network connection has been restored)
  - Monitoring network and device performance through the HololoT platform

 Local and remote device configuration Possibility of a remote firmware update



## **TECHNICAL CHARACTERISTICS**

Pulse input data	
Min. pulse duration (closed contact)	2 ms
Min. pause between pulses (open contact)	20 ms
Max. pulse frequency	45 Hz
Max. pulse frequency with 50% duty cycle	25 Hz
Contact voltage	2.5V3.6V
Contact current	4 μΑ
Contact resistance	1 ΜΩ
Radio interface	
Frequency	LTE Cat NB1 – frequency band B20 (others on demand)
Antenna type	Internal
General data	
Power supply	Integrated battery  Battery life time (25°C): ~10 years (depending on the configuration)
Housing	Material: Thermoplastic  Dimensions (w x h x l): 77 x 77 x 35 mm  Protection type: IP68  Mounting: Bolts on the mountable surface  Connecting cables length: ~1.5 m
Operating temperature range	-20°C+80°C
Weight	250 g