



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, less infrastructure, easy maintenance and reliable data transfer for AMR scenarios.



**LTE Cat NB2
– 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)

- Delivering readouts to the Holosys NB-IoT Cloud from which the data is forwarded to user or third party systems

- 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)

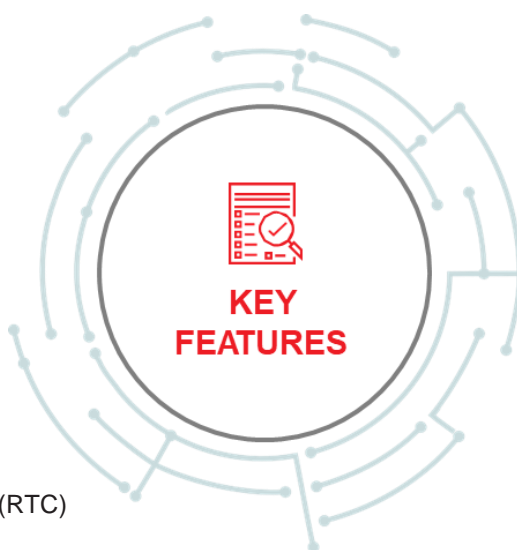
- Local and remote device configuration

- Possibility of a remote firmware update

- 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 Holosys platform



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	2.5V...3.6V
Contact current	4 μ A
Contact resistance	1 M Ω
Radio interface	
LTE Cat NB2	Frequency band B20 (other bands on demand) Max. output power \leq 23dBm
Antenna type	Internal
General data	
Power supply	Integrated battery (non-chargeable) Nominal voltage = 3,6 V d.c. 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