05.2018

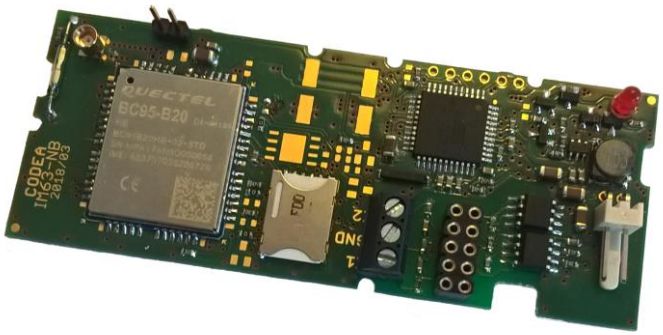
Reading module IM63-NB

For heat meters Kamstrup Multical 603

Radio reading systems are widely used by central heating network operators. However, LTE NB-IoT technology provides a new level of communication, battery life, operating costs and large urban areas coverage. At low investment costs, it also significantly improves work efficiency and reduces error rates during reading by human operators. It avoids disturbing the privacy of customers and reduces the security risks for the human readers.

IM63-NB module provide a number of features for the user. It allows you closely monitoring of customers heating (or cooling) energy consumption over time, signal failures, unauthorized interventions.

Recorded and transmitted data



Current version of firmware sends message 1x per day, where payload is 126 byte long and covers following data:

- **Serial Nr. of connected heat meter**
- **Status of heat meter**
- **Status of battery**
- **IM63 module version**
- **Time/date of current reading**
- **Energy meter count at the time of reading**
- **increments of energy counter since last reading**
- **Medium volume counter at the time of reading**
- **increments of medium counter since last reading**
- **Current temperature of medium inlet**
- **temperatures of medium inlet (every hour) during last 24 hours**
- **Current temperature of medium outlet**
- **temperatures of medium outlet (every hour) during last 24 hours**
- **other diagnostic informations**

Technical parameters

Physical dimensions:	fits directly into meters body, external antenna
Power:	Lithium batteries 2xAA size, replaceable pack with connector
Battery life:	5 years**
Operating temperature:	-10 ° C / + 55 ° C
Short-term temperature:	-20 ° C / + 70 ° C
Storage temperature:	+ 5 ° C to + 35 ° C

** Under normal operating conditions + 5 ° C to + 35 °C, 1 transmission per day
Min. operating temperature -10 ° C (<15 days / year), Max. operating temperature + 55 ° C (<15 days / year).

Radio communication

Standard LTE NB-IoT protocol

Frequency:	800 MHz, B20 band, other version available on request
Enhanced power:	200 mW
Communication:	1x daily for battery life 5 years, other time-schedule available on request