Narrowband Internet of Things (NB-IoT) Logger

Technical Guide W4.74

Future-proof logger device for the next phase of mobile communications technology.

03.25 | W4.74 I20 NB-IOT LOGGER

Applications

Provides network analytics through flow monitoring and pressure management

Product Attributes

Physical robustness

High levels of security

Ease of deployment and use

Low cost

Quality

ISO 9001:2015 Quality Management Systems

We are the supply partner of choice for New Zealand's civil construction industry, specialising in water and infrastructure based solutions.

Narrowband Internet of Things (NB-IoT) is a Low Power Wide Area Network (LPWAN) radio technology standard.

It offers all the advantages of LPWAN – great signal penetration, low power, and low cost – combined with all the advantages of a communications infrastructure supported by major mobile providers – high data rates, low latency (the time between sending and receiving data), high connection density, licenced spectrum, full 2-way comms, standards-based, and robust security including for the SIM.

- NB-IoT uses a subset of the LTE standard, but limits the bandwidth to a single narrow-band of 200kHz. It uses OFDM modulation for downlink communication and SC-FDMA for uplink communications.
- NB-IoT is currently in use by i20 clients around the world.
- Logger purchasing decisions need to take account of the gathering pace of NB-IoT which is set to become the pervasive communications technology for logging devices.

Features

i2O's NB-IoT Loggers are identical to its existing logger products. They therefore offer:

- Physical robustness (IP68, tested in a wide range of temperature and humidity conditions,drop-tested)
- Accuracy and reliability (Swiss transducers,all components tested before shipping, no recalibration required, warranted)
- Ease of deployment and use (small physical size, bracket or zip-tie mounting, configuration with laptop/tablet/mobile device, on-site readings, GPS coordinates automatically recorded, minimal training required)
- Usefulness and flexibility (3 pressure channels,10 or 30 Bar, bi-directional flow channels, 1 second sampling, 1 minute logging, 5 minute dial-ups, decaying alarms set manually or automatically for day and night, transient detection data, voltage, temperature and signal strength readings, supports roaming SIMs,internal or external aerial, internal or external battery or external power)
- High levels of security (encrypted data,minimum number of attack vectors, ISO 27001)
- Low cost (low price, long battery life, field-changeable battery/SIM, field-updatable firmware)
- The i2O NB-IoT logger also offers 2G, so if 2G is available you can deploy it now and switch to NB-IoT later
- From a company that offers unrivalled:innovation; commitment to quality and continuous improvement; customer care and technical support; lifetime value for money