NORDIGI
We make Internet of Things®

Nordigi Multinode

1. General

Nordigi Mulitnode is a versatile product which can have different functions in an IoT system
The multinode consists mainly of 4 parts.

- Wifi controller with RF
- Bluetooth Low Energy (BLE) controller with RF
- Sensors
- Input/output module

The multimode can act as:

- WiFi/BLE (Bluetooth Low Energy) gateway
  The multimode has capability to transmit data from multiple BLE devices on Wifi in a seamless manner.
- WiFi sensor module
  The multimode can be used to present data from the sensors on WiFi as a standalone unit
- WiFi or BLE interface to eksternal sensors

2. Specification

Power
The board can be powered in two ways, either from a standard USB micro type B or from a 3-3.3V battery

Radio

- Bluetooth Low Energy (BLE) stack with BT 4.2 support
- WiFi 802.11bgn

Mechanical:
Enclosure size: 45x78x15mm
Board size: 34x65mm

Environment:
Temperature operating: -40 to 75 C

Sensors

- Temperature sensor, measuring scale: -35 to 75 C +/-0,3
- Humidity sensor, measuring scale: 0-100% RH +/-2%
- 3 axis accelerometers: max +/- 8g range on all axis
- Ambient light-sensor

All sensors have an interrupt output to trig an event based on pre-set thresholds in the sensor.

Input/Output

The multinode has versatile I/O module for connection to other equipment

- 3,3 V in/out
- Selectable RS232/422/485
- I2C
- Analog input 16/12bit 1 single ended or 1 differential with programmable gain setting
- Analog output 12-bit DAC
- 3 digital I/O 3,3V TTL
- 1 potential free input 24V
- 1 potential free output max. 120mA

3. CE compliance

The Nordigi Multinode is tested and approved according to:

- IEC 62368-1: 2018

  Audio/video, information and communication technology equipment - Part 1: Safety requirements

- EN 300 328

  Wideband transmission systems; Data transmission equipment operating
  In the 2,4 GHz band; Harmonized Standard for access to radio spectrum

- EN 301 489-1 V2.1.1 (2019-04)

  EMC standard for radio equipment and services; Part 1: Common technical requirements

- EN 301 489-17 V3.1.1 (2017-02)

  EMC standard for radio equipment and services;
  Part 17: Specific conditions for Broadband Data Transmission Systems

- EN 60601-1-2: 2015

  Medical electrical equipment - Part 1-2: General requirements for
  basic safety and essential performance - Collateral Standard:
  Electromagnetic disturbances - Requirements and tests