

nemi Connect

Small data receiver for direct connection to the PC via USB-C

Description

nemi Connect is a compact receiver for up to three sensors / telemetry modules in the radio network nemi Link 2400. It transmits the received data directly to your PC via USB connection. The supplied PC software allows easy configuration, data display and storage for uncomplicated further processing.

Key Features

- **Compact design**
(56 x 46 x 27) mm
- **Receiver for up to 3 sensors / telemetry modules** in the radio network nemi Link 2400
- Cabled data transmission via **USB interface**
- Easy handling due to **direct connection to PC** via USB-C
- **Included software** simplifies configuration, live display and storage of data for uncomplicated further processing



nemi Link 2400 - i4M's robust **high-speed radio technology** in the 2.4 GHz frequency band; range up to 20 m (indoor)



nemi Link 2400 XR - i4M's robust **high-speed radio technology** in the 2.4 GHz frequency band; range up to 300 m



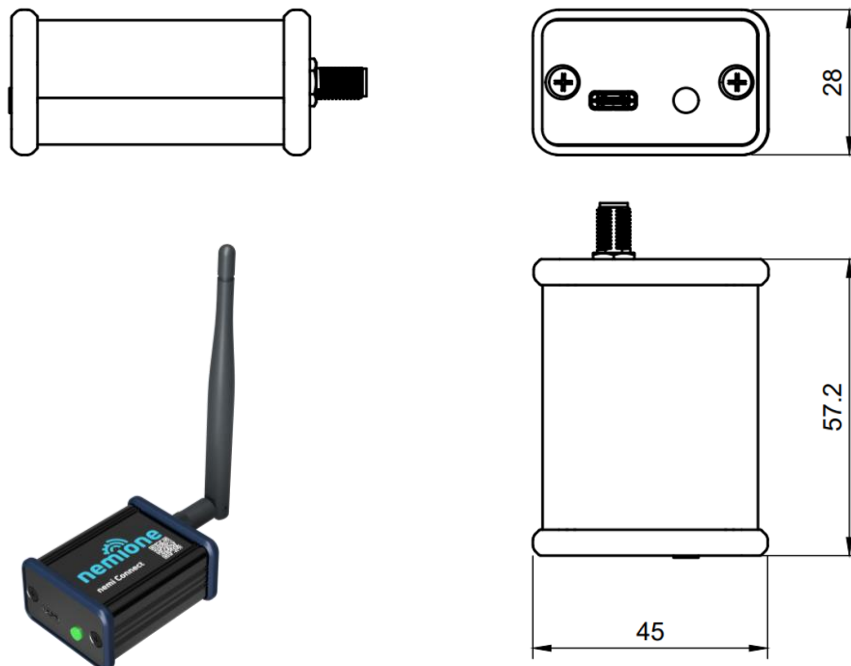
Power supply and data transfer via **USB-C**

Specifications

General information		
Dimensions (without antenna and connectors)	56 x 46 x 27	mm
Weight	approx. 60	grams
External power supply	5 (USB-C)	V
Data connection to the PC	USB-C to standard USB 2.0	-
PC software for changing settings, displaying and saving data	Supplied	-
Temperature range permitted during operation	-20 to 80	°C
Housing protection class	IP 41	-

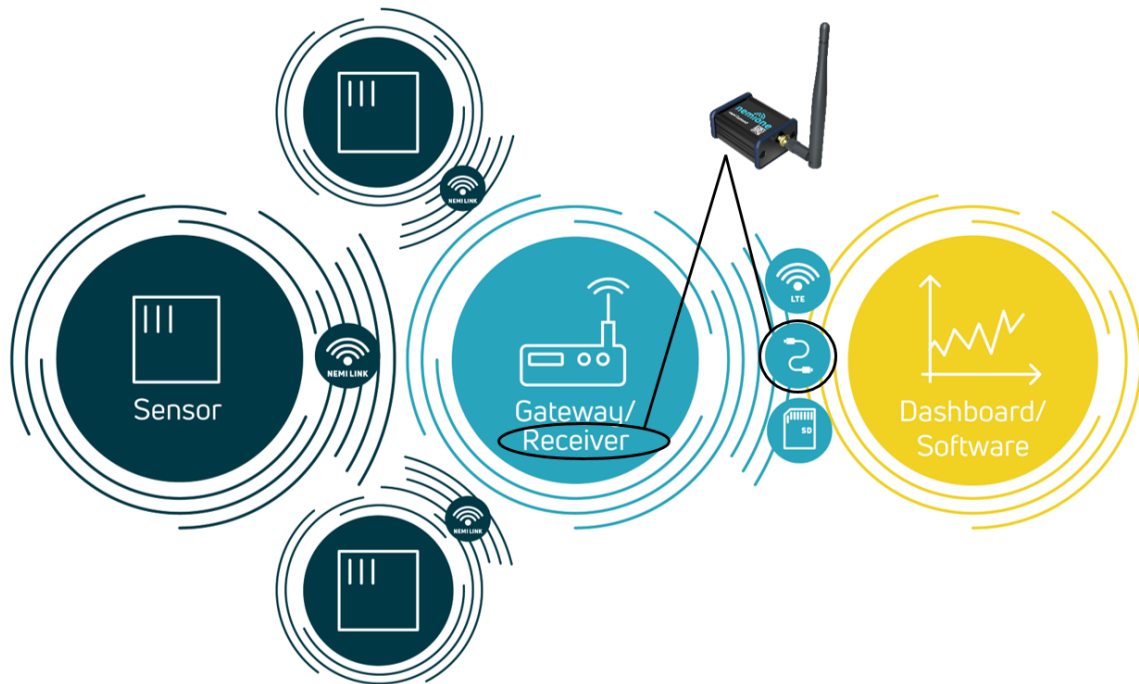
Dimensions

(All dimensions in mm)



Data transmission

nemi Connect is a receiver module that can be used to receive data from up to three wireless sensors / telemetry modules in the nemi Link 2400 radio network. nemi Connect then transmits the data via USB-C cable directly to a connected measuring computer.



Radio technology nemi Link 2400

nemi Link 2400 HS (High-speed wireless network)

Our own radio technology nemi Link 2400 is a **wireless, battery-powered sensor network** in the 2.4 GHz frequency band with star topology and one receiver module. The **high efficiency** of our robust radio technology **enables very long battery runtimes** of our products. Our wireless sensors synchronize their internal clocks to the clock of the receiver module with extremely small deviations.

Radio technology nemi Link 2400		
Radio channel	between 2,402 – 2,478 (adjustable in 1 MHz steps)	MHz
Time synchronization deviation	< 100	µs
Radio range	up to 20 (indoor) up to 300 (outside line of sight)	m
Max. sum sampling rate at 24 bits per sample	approx. 36,000	Hz
Sensor nodes per receiver module	3	-

nemi Link 2400 XR (Extended Range wireless network)

To provide a compromise between our high-speed network nemi Link 2400 and our long-range network nemi Link 868 we developed our new network nemi Link 2400 XR. In comparison to nemi Link 2400 it has an extended range, lower data rates and still enables long battery life. It is using the 2.4 GHz frequency band and is available as firmware upgrade. nemi Link 2400 XR can be used with our standard nemione® products.

Radio technology nemi Link 2400 XR		
Radio channel	between 2,402 – 2,478 (adjustable in 1 MHz steps)	MHz
Time synchronization deviation	< 100	µs
Radio range	up to 300 urban environment up to 1.800 theoretical	m
Max. sum sampling rate at 24 bits per sample	500 - 1500	Hz
Sensor nodes per receiver module	8	-

In addition, **other modes** are available with sampling rates and ranges between the high-speed mode and the extended range mode. Please get in contact for further information:

info@nemi.one

Compatible sensor and telemetry modules in the nemi Link 2400 wireless network

nemi Connect is compatible with all sensor and telemetry modules in i4M's nemi Link 2400 network. The following products are available under the nemione® trademark:



[nemi G+](#)



[nemi DAQ](#)

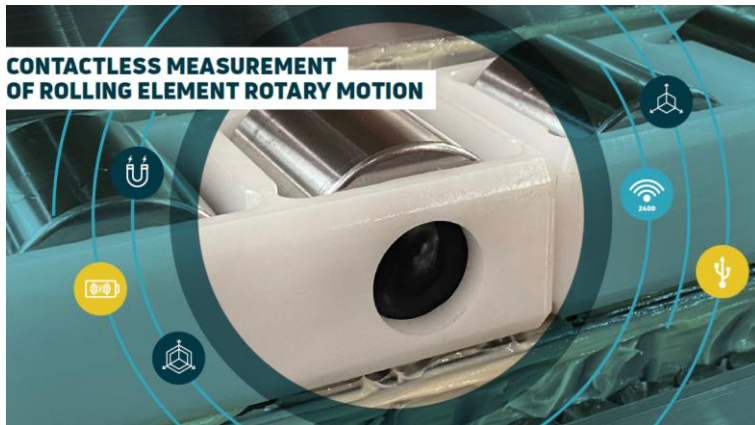


[nemi DAQ nano](#)

Application

nemi Connect is suitable as a basic product for all applications in which the receiver is connected directly to the PC. It is particularly popular for receiving sensor data at test benches or in prototype applications.

Download use case:

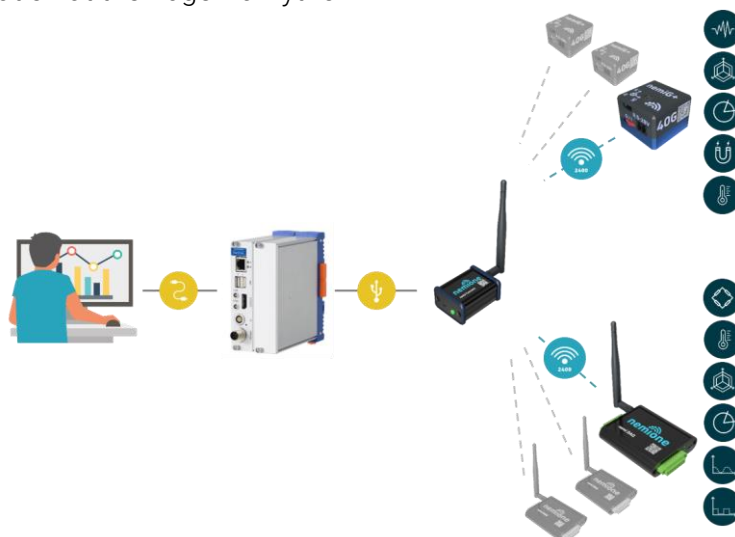


Wireless extension for Gantner Instruments-DAQ systems

With nemi Connect, the wirelessly transmitted data can be displayed directly in GI Bench. For this purpose, nemi Connect is connected to a Gantner Instruments controller via USB cable. nemi Connect receives the data from the nemione® sensors in the nemi Link 2400 wireless network and transfers them directly into GI Bench.

Advantages:

- Digital data remain digital
- Direct time synchronization via GI DAQ network
- Data feed directly into GI DAQ network / Cloud
- Data evaluation at the Edge via Python



Data Analysis

Upon request, we will be happy to support you with data analysis. The data analyses can be performed directly in the sensor or in the gateway by edge analytics as well as on the server or measuring computer. A great advantage of edge analytics is the **reduction of the transmitted data to the essentials** ("smart data"). This **reduces storage space** and **increases battery runtimes**.

Based on our knowledge from a multitude of previous projects, we have developed **algorithms for data evaluation** to generate **maximum added value** for our customers. We will gladly advise you on this. In addition to our existing algorithms we create **individualized scripts** upon request.

At the same time, the **data remains your capital**: We do not rely on big cloud providers but **keep the data in your IT ecosystem**. Alternatively, you can rely on our nemione® cloud solutions - hosted in the European Union.

Contact

nemione® is a trademark of

i4M technologies GmbH
Försterstrasse 5
52072 Aachen
+49 (0) 157 34 10 59 30
info@nemi.one

www.nemi.one
www.i4M-tech.de

Copyright © 2022 i4M technologies GmbH
Subject to changes