



(1) **EU-TYPE EXAMINATION CERTIFICATE**

(2) Product Intended for use in Potentially Explosive Atmospheres – Directive 2014/34/EU

(3) EU-Type Examination Certificate Number:

SIQ 20 ATEX 120 X

Issue: 1



- (4) Product: Gateway with BLE and GSM 2G/3G module, type: myDatalogEx
- (5) Manufacturer: Microtronics Engineering GmbH
- (6) Address: Hauptstrasse 7, 3244 Ruprechtshofen, Austria
- (7) This product and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.
- (8) SIQ Ljubljana, Notified body number 1304 in accordance with Article 17 and Article 21 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres, given in Annex II to the Directive.

The examination and test results are recorded in the confidential test report TEx413/21.

- (9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:
EN IEC 60079-0:2018+AC:2020 **EN 60079-11:2012**

Where additional criteria beyond those given here have been used, they are listed at item (18) in the schedule to this certificate.

- (10) If the sign "X" is placed after the certificate number, it indicates that the product is subject to Specific Conditions of Use specified in the schedule to this certificate.
- (11) This EU-Type Examination Certificate relates only to the design and construction of the specified product in accordance to the Directive 2014/34/EU. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.
- (12) The marking of the product shall include the following:

II 2 G Ex ib IIB T3 Gb

Certification body

Ljubljana, 27 October 2021

Bojan Pečavar



(13)

SCHEDULE

(14) **EU-Type Examination Certificate Number SIQ 20 ATEX 120 X, Issue: 1**

(15) Description of Product

Gateway with BLE and GSM 2G/3G module, type: myDatalogEx, is a data logger for recording and transferring analogue signals, designed in type of protection intrinsic safety 'ib'. The generated measurement data is recorded in an adjustable interval, temporarily saved in the internal data memory and then transferred to a myDatanet server via a GSM connection or Bluetooth.

The device has internal batteries for power supply. The batteries are not intended to be replaced by user. The device has two external connectors, one for connection of the antenna and the other for connection of the intrinsically safe sensor. It has an adjustable (0...22 V) voltage output to supply the sensors.

Enclosure is made from plastic material and has additional plastic protective armour.

Technical data:

Ambient temperature range:	From -20°C to +50°C
Sensor supply:	U _o = 25.6 V I _o = 82 mA P _o = 523 mW C _o = 0.31 µF 0.36 µF 0.465 µF L _o = 1000 µH 250 µH 100 µH
Data transmission	Bluetooth Low Energy: Range: 100 m (depending on the environmental conditions) Transmission rate: 120 data records/sec. 2G/3G modem (World): 2G GPRS 850/900MHz & 1800/1900MHz UMTS B1, B2, B5, B8, B19

(16) Test Report

TEx413/21 dated 27 October 2021.

(17) Specific Conditions of Use

- Ambient temperature range $-20^{\circ}\text{C} \leq T_{\text{amb}} \leq +50^{\circ}\text{C}$.
- Potential electrostatic charging hazard: Clean the device with moist or electrostatically dissipative cloth.
- The device shall be protected against UV radiation.
- Batteries must be replaced only by manufacturer or authorized service.
- Connector for external sensor shall be always protected by intended plug or connected to sensor.



(18) Essential Health and Safety Requirements

Compliance with the Essential Health and Safety Requirements has been assured by compliance with the requirements of the standards listed under item (9).

(19) Drawings and Documents

Description	Number	Issue	Date
* Change description, BLE gateway/myDatalogEx, Microtronics Engineering GmbH	/	Doc. Rev.: 5	7. 7. 2021
* MyDatalogEx, HW-Description, Microtronics Engineering GmbH	/	01v002 Rev0	18. 10. 2021
* Calculation BLE_ADIN, Microtronics Engineering GmbH	/	Ver: 01v001 Doc. Rev.: A	18. 10. 2021
Marking label, myDatalogEx, Microtronics Engineering GmbH	/	/	/
Schematics, BLE_connector, 010128_02_BLE_connector_stack_01v003, Microtronics Engineering GmbH	/	Version: 01v003 Variant: 02 Revision: A	14. 6. 2019
010128_02_BLE_connector_stack_01v003, View: TOP, Microtronics Engineering GmbH	/	/	14. 6. 2019
010128_02_BLE_connector_01v003, View: BOTTOM, Microtronics Engineering GmbH	/	/	14. 6. 2019
Component list, BOM-BLE_connector (010128_02_BLE_connector_stack_01v003), Microtronics Engineering GmbH	ID: 10128	/	14. 6. 2019
Component list sorted, BOM_sorted-BLE_connector (010128_02_BLE_connector_01v003), Microtronics Engineering GmbH	ID: 10128	/	14. 6. 2019
Drawing, myDatalogEx Connector vergossen, Microtronics Engineering GmbH	010110	Version: 01v000 Revision: 00	1. 10. 2020
BILDТАFEL 010110 myDatalogEx Connector vergossen, Microtronics Engineering GmbH	/	Version: 01v000	/
Gerber files, myDatalogEx Connector, Microtronics Engineering GmbH	/	/	/
* Schematics, BLE gateway, 10089_02A_BLE_gateway_01v006_3G_world_TMA, Version: 01v006, Variante: 02, Microtronics Engineering GmbH	/	Revision: A	27. 10. 2021
* 10089_02A_BLE_gateway_01v006_3G_world_TMA, View: TOP, Microtronics Engineering GmbH	/	/	1. 6. 2021
* 10089_02A_BLE_gateway_01v006_3G_world_TMA, View: BOTTOM, Microtronics Engineering GmbH	/	/	1. 6. 2021



Description	Number	Issue	Date
* Component list, BOM-BLE_gateway (10089_02A_BLE_gateway_01v006_3G_world_TMA.xls), Microtronics Engineering GmbH	ID: 10089	/	1. 6. 2021
* Component list sorted, BOM_sorted-BLE_gateway(10089_02A_BLE_gateway_01v006_3G_world_TMA)1.xls, Microtronics Engineering GmbH	ID: 10089	/	1. 6. 2021
* Gerber files, file name: "7936_Project Outputs for BLE_gateway", Microtronics Engineering GmbH	/	Version: 01v006	/
Schematics, myDatalogEx, 10008 (myDatalogEx BLE_ADIN) 01v003, Microtronics Engineering GmbH	/	Version: 01v003 Variant: BLE_ADIN	18. 9. 2020
myDatalogEx BLE_ADIN 01v003, View: TOP, Microtronics Engineering GmbH	/	/	7. 7. 2020
myDatalogEx BLE_ADIN 01v003, View: BOTTOM, Microtronics Engineering GmbH	/	/	7. 7. 2020
Component list, BOM_10008_(myDatalogEx BLE_ADIN)_01v003, Microtronics Engineering GmbH	ID: 10008	Version: 01v003	7. 7. 2020
Component list sorted, BOM_sorted_10008_(myDatalogEx BLE_ADIN)_01v003, Microtronics Engineering GmbH	ID: 10008	Version: 01v003	7. 7. 2020
Gerber files, myDatalogEx BLE_ADIN, Microtronics Engineering GmbH	/	/	/
BILDТАFEL 010171 myDatalogEx ADIN Elektronik vergossen, Microtronics Engineering GmbH	/	Version: 01v000	/
Drawing, Vergussrahmen BLE ADIN, Microtronics Engineering GmbH	010140	Version: 01v000 Revision: 00	24. 7. 2019
BILDТАFEL 010108 myDatalogEx, Microtronics Engineering GmbH	/	Version: 01v000	/
BILDТАFEL 010109 Elektronikeinheit myDatalogEx, Microtronics Engineering GmbH	/	Version: 01v000	/
Drawing, Deckel transparent bedruckt, Microtronics Engineering GmbH	006322	Version: 01v000 Revision: 00	15. 2. 2016
Drawing, Gehäuseboden, Part number: 010113, Microtronics Engineering GmbH	/	Version: 01v000 Revision: 00	17. 7. 2019
Drawing, myDatasensMINI Schutzpanzer, Part number: 005341, Microtronics Engineering GmbH	/	Version: 01v001 Revision: 00	15. 9. 2015
Drawing, myDatasensMINI Elektronikträger, Part number: 005773, Microtronics Engineering GmbH	/	Version: 02V000 Revision: 00	9. 10. 2015
* User manual, myDatalogEx, Microtronics Engineering GmbH	301022	Revision: 06	22. 10. 2021

*Note: An * is included before the title of documents that are new or revised.*



(20) Consolidated Certificates

This certificate is a consolidated certificate and reflects the latest status of the certification, including the following:

- Original EC-Type Examination Certificate No. SIQ 20 ATEX 120 X.
- Issue 1: Some electronic components are replaced or changed.