Physical-Technical Testing Institute
Ostrava - Radvanice

(1)

Type Examination Certificate

(2)

Equipment or Protective Systems Intended for Use in Potentially Explosive Atmospheres (Directive 2014/34/EU)

(3) Type Examination Certificate number:

FTZÚ 21 ATEX 0040X

(4) Product: **Vibration analyser A4300 PRO EX**

(5) Manufacturer: **Adash s.r.o.**

(6) Address: **Hlubinská 1379/32, 702 00 Ostrava – Moravská Ostrava, Czech Republic**

(7) This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

(8) The Physical-Technical Testing Institute 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 Directive 2014/34/EU of the European Parliament and of the Council, dated 26.02.2014.

The examination and test results are recorded in confidential Report number:

21/0040 dated 24.10.2022

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN IEC 60079-0:2018, EN 60079-11:2012, EN 60079-28:2015

(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 type examination certificate relates only to the design of the specified product and not to specific items of equipment subsequently manufactured.

(12) The marking of the product shall include the following:

Ex II 3G Ex ic op is IIC T3 Gc

This certificate is valid till: **31.10.2027**

Responsible person:

Dipl. Ing. Lukáš Martinák
Head of Certification Body

FYZIKÁLNĚ TECHNICKÝ ZKUŠEBNÍ ÚSTAV, s.p. OSTRAVA-RADVANICE

Date of issue: 24.10.2022

Physical-Technical Testing Institute, s.p., Pikartská 1337/7, 716 07 Ostrava - Radvanice, Czech Republic
tel.: +420 595 223 111, +420 604 203 525, e-mail: ftzu@ftzu.cz, www.ftzu.cz

(13) **Schedule**

(14) # Type Examination Certificate No. FTZÚ 21 ATEX 0040X

(15) Description of Product:

The product is three channel handheld vibration analyser with display. The product is powered by two Li-Ion cells. The enclosure of product consists of aluminium profile without surface treatment. On the surface of product enclosure are blue antistatic stickers and keyboard. On the front side of product enclosure are three connectors for connection of sensors, IR sensor, USB connector and LED´s. On the bottom side of enclosure is charging connector.

Technical parameters:

Ambient temperature:	from -10°C to +50°C
	from 0°C to +35°C for charging
Charging connector:	Um = 250 V AC
USB connector:	Um = 6V
Input connector IN1:	Uo = 25.2 V; Io = 58 mA; Lo = 60 µH; Co = 100 nF
Input connector IN2:	Uo = 25.2 V; Io = 58 mA; Lo = 60 µH; Co = 100 nF
Input connector TRIG:	Uo = 6 V; Io = 425 mA; Lo = 100 µH; Co = 10 µF

(16) Report Number: 21/0040

(17) Specific Conditions of Use:

1. The product shall be charged only outside Ex area. The ambient temperature during charging shall be in range 0°C to +35°C.
2. The USB connector shall be used only outside Ex area. The connected product shall be in accordance with standard IEC 60950 or IEC 61010-1.

(18) Essential Health and Safety Requirements:

Compliance with the Essential Health and Safety Requirements is covered by standards mentioned in clause (9) of this certificate.

Responsible person:

Dipl. Ing. Lukáš Martinák
Head of Certification Body

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(13) **Schedule**

(14) **Type Examination Certificate No. FTZÚ 21 ATEX 0040X**

(19) Drawings and Documents:

Number	Sheets	Issue	Date	Description
A4300 PRO EX	69	--	12.09.2022	Technical documentation
--	98	1.9	19.07.2021	User´s manual
18.0	4	--	22.08.2022	Labels
2.0	1	1.0	05.09.2022	Block diagram
12.0	1	--	29.07.2022	PCB stack drawing
3.0	1	1.0	29.07.2022	Schematic diagram
3.1	1	1.0	29.07.2022	BOM of display
3.2	1	--	05.08.2022	Isolation of backlight
3.3	1	--	14.08.2022	Encapsulation of display
4.0	1	1.0	15.08.2022	Schematic diagram of flash disc
4.1	1	--	15.08.2022	BOM of flash drive
4.2	1	--	14.08.2022	Encapsulation of flash drive
6.0	2	1.0	09.08.2022	Schematic diagram of ADSP
6.1	1	1.0	27.07.2022	PCB ADSP layout TOP
6.2	1	1.0	09.09.2022	PCB ADSP layout IN2
6.3	1	1.0	09.09.2022	PCB ADSP layout IN3
6.4	1	1.0	09.09.2022	PCB ADSP layout BOT
6.5	1	1.0	27.07.2022	PCB ADSP parts placement TOP
6.6	1	1.0	27.07.2022	PCB ADSP parts placement BOT
6.7	6	1.0	03.08.2022	BOM of ADSP PCB
6.8	1	--	14.08.2022	Encapsulation of ADSP
7.0	1	1.1	29.07.2022	Schematic diagram of COMP PCB
7.1	1	1.1	27.07.2022	PCB COMP layout TOP
7.2	1	1.1	27.07.2022	PCB COMP layout IN2
7.3	1	1.1	27.07.2022	PCB COMP layout IN3
7.4	1	1.1	27.07.2022	PCB COMP layout BOT
7.5	1	1.1	27.07.2022	PCB COMP parts placement TOP
7.6	1	1.1	27.07.2022	PCB COMP parts placement BOT
7.7	4	1.1	03.08.2022	BOM of COMP PCB
7.8	1	--	14.08.2022	Encapsulation of COMP
8.0	1	1.0	29.07.2022	Schematic diagram of INPUT PCB
8.1	1	1.0	27.07.2022	PCB COMP layout TOP
8.2	1	1.0	27.07.2022	PCB COMP layout IN2
8.3	1	1.0	27.07.2022	PCB COMP layout IN3
8.4	1	1.0	27.07.2022	PCB COMP layout BOT
8.5	1	1.0	27.07.2022	PCB COMP parts placement TOP

Responsible person:

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(13) **Schedule**

(14) **Type Examination Certificate No. FTZÚ 21 ATEX 0040X**

(19) Drawings and Documents: - continuation

Number	Sheets	Issue	Date	Description
8.6	1	1.0	27.07.2022	PCB COMP parts placement BOT
8.7	1	--	03.08.2022	BOM of COMP PCB
9.0	1	1.4	25.04.2016	Schematic diagram of USB PCB
9.1	1	1.4	27.07.2022	PCB USB layout TOP
9.2	1	1.4	27.07.2022	PCB USB layout BOT
9.3	1	1.4	27.07.2022	PCB USB parts placement TOP
9.4	1	1.4	02.08.2022	BOM of USB PCB
10.0	1	1.2	09.08.2022	Schematic diagram of BP PCB
10.1	1	1.2	27.07.2022	PCB BP layout TOP
10.2	1	1.2	27.07.2022	PCB BP layout IN2
10.3	1	1.2	27.07.2022	PCB BP layout IN3
10.4	1	1.2	27.07.2022	PCB BP layout BOT
10.5	1	1.2	27.07.2022	PCB BP parts placement TOP
10.6	1	1.2	27.07.2022	PCB BP parts placement BOT
10.7	1	1.2	03.08.2022	BOM of BP PCB
10.8	1	--	30.07.2022	Insulation of BP
11.0	1	1.0	29.07.2022	Schematic diagram of BPCON PCB
11.1	1	1.0	27.07.2022	PCB BPCON layout TOP
11.2	1	1.0	27.07.2022	PCB BPCON parts placement TOP
11.3	1	1.0	29.07.2022	BOM of PCB BPCON

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