

[1]

EU-TYPE EXAMINATION CERTIFICATE

[2] Directive 2014/34/EU of the European Parliament and of the Council of 26 February 2014

[3] EU-Type Examination Certificate Number: **Presafe 17 ATEX 10552X** **Issue 6**

[4] Product: **XT50 measuring unit**

[5] Manufacturer: **Easy-Laser AB**

[6] Address: **Alfagatan 6
431 49 Mölndal
Sweden**

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

[8] DNV Product Assurance AS, notified body number 2460, 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 confidential reports listed in item 16.

[9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with: **EN IEC 60079-0:2018 and EN 60079-11:2012 and EN 60079-28:2015**


Where additional criteria beyond those given here have been used, they are listed at item 18 in the Schedule.

[10] If the sign "X" is placed after the certificate number, it indicates that the product is subject to the "Specific Conditions of Use" listed under item 17 of 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 op is IIC T4 Gb Ta: -10°C ≤ Ta ≤ +50°C**

 **II 2 D Ex ib op is IIIC T135°C Db**

Date of issue:
2024-03-08



Asle Kaastad
For DNV Product Assurance AS
The Certificate has been digitally signed.
See www.dnv.com/digitalsignatures for info



[13] **Schedule**

[14] **EU-Type Examination Certificate No:** Presafe 17 ATEX 10552X Issue 6

[15] **Description of Product**

The XT50 is a measuring unit with an Ex-tablet or an Ex-phone that form a shaft alignment system. The measuring unit are connected wireless to a tablet or phone. There is a built-in O-led that shows some of the data. The units are powered by a built in, non-replaceable Lithium-Ion battery. The laser module has been assessed inherently safe optical radiation. The enclosure of the unit is made of aluminum and ABS/TPE plastic.

Type designation

XT50

Electrical Data

Nom Voltage 3.8V, Max open-circuit voltage 4.2V, Lithium-Ion cells

Ambient temperature:

-10°C to +50°C

Routine tests

None

[16] **Report No.:** 208496
Project No.: PRJN-208496-2020-PA-NOR

[17] **Specific Conditions of Use**
1. Only charge battery in safe area.

[18] **Essential Health and Safety Requirements**

Met by compliance with the requirements mentioned in item 9.

[19] Drawings and documents

Technical Documents			
Title:	Drawing No.:	Rev. Level:	Date:
Casting compound TIA208R	03-1422	A	2022-10-07
Schedule documents - Easy-Laser XT50	*)10-0688	4.0	2024-03-04
XT50 PCB Casting procedure	*)10-0812	2.0	2023-10-30
XT50 Battery specification	10-1230	1.0	2022-10-25
XT50 General drawing for EX properties	*)10-1275	1.0	2023-11-24
XT50 Aluminium back cover specification	*)10-1276	1.0	2023-10-30
XT50 Plastic housing S unit specification	*)10-1277	1.0	2023-10-30
XT50 Plastic housing M unit specification	*)10-1278	1.0	2023-10-30
XT50 Plastic cover S unit specification	*)10-1279	1.0	2023-10-30
XT50 Plastic cover M unit specification	*)10-1280	1.0	2023-10-30
XT50 Backside label EX information specification	*)10-1281	1.0	2024-02-02
XT50 Laser module specification	10-1282	1.0	2023-08-15
XT50 PCB specifications	*)10-1283	1.0	2024-03-04
XT50 PSD specification	*)10-1284	1.0	2023-10-30
XT50 OLED display specification	*)10-1285	1.0	2023-10-30
XT50 Plastic casting frames specification	*)10-1287	1.0	2024-02-28
XT50 DC charge connector specification	*)10-1309	1.0	2023-11-13
XT50 Flexible flat cables specification	*)10-1310	1.0	2023-11-20
XT50 Circuitboard main	*)12-0779	V0160	2024-02-28
XT50 Circuitboard for PSD	*)12-0979	V0120	2024-02-28
XT50 Circuitboard for battery and charging	12-0984	V0114	2023-03-07
<i>Note: An * is included before the title of documents that are new or revised.</i>			

[20] Certificate History

Issue	Description	Issue date	Report no.
0	Original issue	2017-12-12	D0002236
1	Update the document to 12-0979 Circuitboard dokuments V0111, R8 change to 0R RES0603 Thick film 1% 0.1W. Instruksjon ingjutting av kretskort till XT50 update to Revision B	2018-04-20	D0002236
2	Update the encapsulation and battery charging DC-plug.	2021-04-23	208496
3	New alternative battery E-One Moli ICP103450CA. Change new OLED display. Add alternative OP-AMP U1 and U2 in board 10-0979 V0112. Change the document system number and revision.	2022-11-03	276637
4	Correct the power ratings of resistors: New V0151 of 12-0779 (R21 changed), V0113 of 12-0979 (R22, R24, R28 changed), and V0114 of 12-0984 (R1 changed).	2023-04-05	276637
5	Adding laser diode model QL65D7SA-L by QSI CO. Ltd. for OP IS.	2023-09-06	PRJN-208496
6	Details of change: Revised marking label and inserted notified body number and IIIC EPL Db. Renamed document to "10-0688 Schedule documents - Easy-Laser XT50". Corrected typing error in the original report NO/PRE/ExTR17.0008/00 PCB 12-0979, PCB 12-0779 has added some alternative non-safety components which do not affecting the safety parts. Component U17 (3D digital accelerometer and a 3D digital gyroscope) on PCB 12-0779 becomes "end-of-life". Therefore, added an alternative same to this component in the BOM for 12-0779. Current U17: LSM6DS3. New U17 (OPTION): LSM6DS3TR-C Corrected minor typing error in the schedule documents. Instructions have been upgraded.	2024-03-08	PRJN-208496

END OF CERTIFICATE