

Test report nr. R25187401

Federal Communication Commission (FCC)

Customer	Autec S.r.l. Via Pomaroli, 65 – 36030 Caldogno (VI) – Italy	
(#) FCC ID	OQA-AX0A02Z0W1	
(#) Description of item tested	Remote station	
(#) Trademark	Autec	
(#) Model and/or type reference	Model AX0A0 Type 2Z0W1	
(#) Manufacturer	Autec S.r.l. Via Pomaroli, 65 – 36030 Caldogno (VI) – Italy	
(#) Rating(s)	3,7 Vdc from battery	
Test method requested, standard(s)	KDB 447498 D01 General RF Exposure Guidance v06	
Tested by (name / position & signature)	S. Zanivan <i>Technician</i>	
Approved by (name / position & signature)	F. Marenda <i>Laboratory manager</i>	
Date of issue	13.11.2025	
General disclaimer	The test results presented in this report relate only to the item tested. This report shall not be reproduced, except in full, without the written approval of DEKRA Testing and Certification S.r.l.	
Report template No	FCC_SAR_portable_DEKRA	

(#) information provided by the customer

Summary

SUMMARY	2
COMPETENCES AND GUARANTEES	3
GENERAL CONDITIONS	3
DATA PROVIDED BY THE CUSTOMER	3
REFERENCE STANDARDS	4
USAGE OF SAMPLES	5
TEST SAMPLE DESCRIPTION	6
PHOTOS OF THE TEST ITEM	7
TESTING PERIOD AND PLACE	10
DOCUMENT HISTORY	10
LIST OF ATTACHMENTS	10
ENVIRONMENTAL CONDITIONS	11
REMARKS AND COMMENTS	12
DEVIATIONS FROM TEST SPECIFICATION	12
TESTING VERDICTS	12
VERDICT SUMMARY	13
TEST RESULTS	14
RF EXPOSURE ANALYSIS	14
ATTACHMENT 1	17

Competences and guarantees

In order to assure the traceability to other national and international laboratories, DEKRA Testing and Certification S.r.l. has a calibration and maintenance program for its measurement equipment.

DEKRA Testing and Certification S.r.l. guarantees the reliability of the data presented in this report, which is the result of the measurements and the tests performed to the item under test on the date and under the conditions stated on the report and, it is based on the knowledge and technical facilities available at DEKRA Testing and Certification S.r.l. at the time of performance of the test.

DEKRA Testing and Certification S.r.l. is liable to the customer for the maintenance of the confidentiality of all information related to the item under test and the results of the test.

General conditions

1. This report is only referred to the item that has undergone the test.
2. This report does not constitute or imply on its own an approval of the product by the Certification Bodies or competent Authorities.
3. This document is only valid if complete; no partial reproduction can be made without previous written permission of DEKRA Testing and Certification S.r.l.
4. This test report cannot be used partially or in full for publicity and/or promotional purposes without previous written permission of DEKRA Testing and Certification S.r.l. and the Accreditation Bodies.

Data provided by the customer

Information relating to the description of the sample, components list, and software/hardware version (if reported) are provided by the customer/manufacturer. DEKRA Testing and Certification S.r.l. cannot be considered responsible for this information, for any other document provided by the customer/manufacturer and for any difference between the software/hardware release present in the tested sample and that present in the object intended for final sale.

In some cases, the software in the tested sample is in a version dedicated exclusively to the test, and therefore does not represent the software installed in the final version of the product.

Reference standards

Standard(s)	Description
KDB 447498 D01 General RF Exposure Guidance v06	RF exposure procedures and equipment authorization policies for mobile and portable devices

Usage of samples

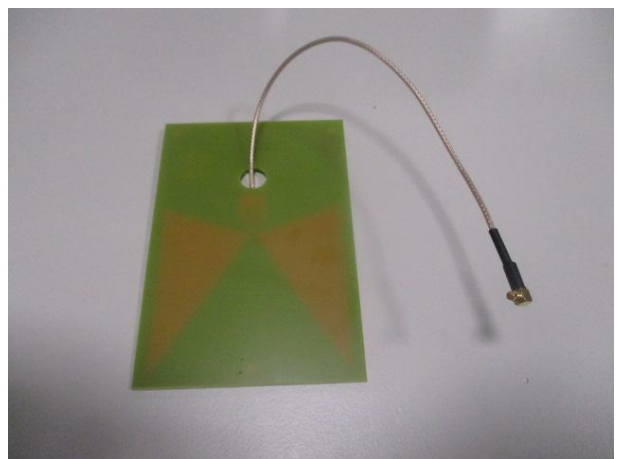
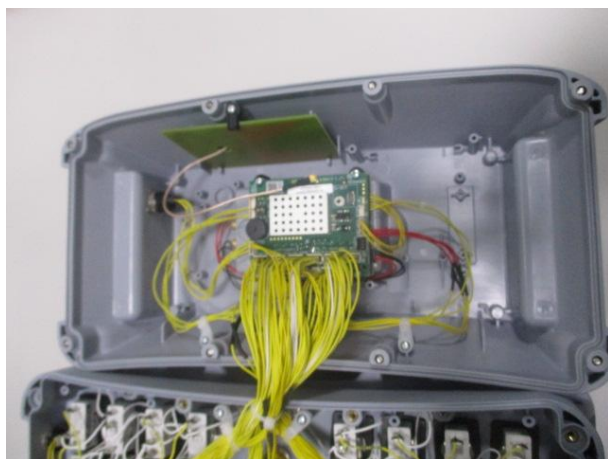
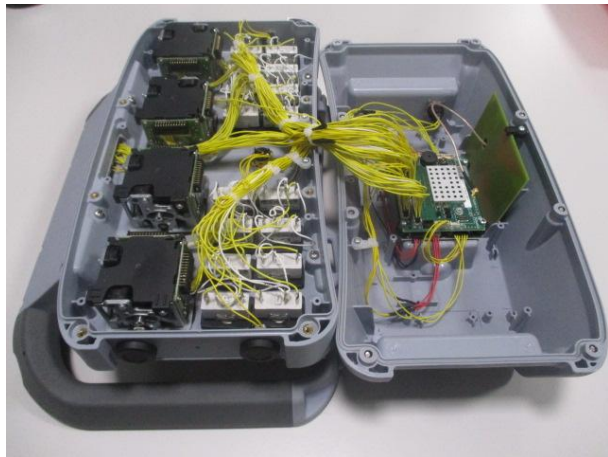
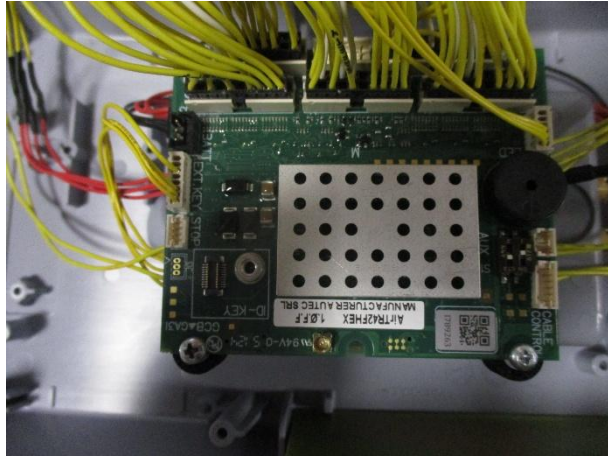
Sample(s) used for testing chosen by the customer; DEKRA Testing and Certification S.r.l. cannot be considered responsible for the selection of the sample(s).

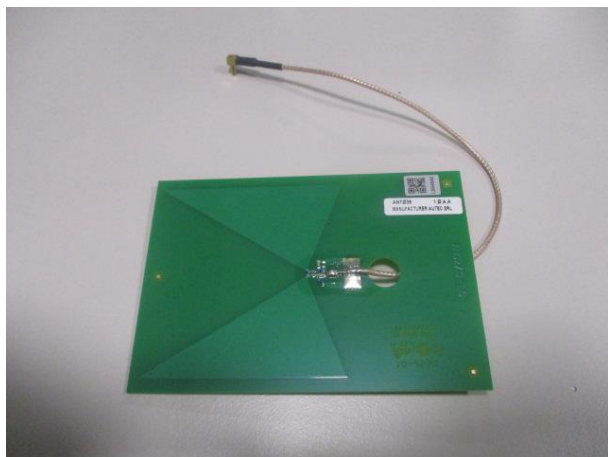
Internal identification	Serial number/Customer Id	Date of reception	Notes
P251025	--	29.09.2025	--

Test sample description

Test power supply	Voltage and Frequency		Reference poles										
			L1	L2	L3	N	PE						
	☐	AC:	☐	☐	☐	☐	☐						
	☐	AC:	☐	☐	☐	☐	☐						
	☒	DC: 3,7 V from battery											
Frequency band(s)	☐	DC:											
	902 – 928 MHz												
	915,050 MHz												
	921,400 MHz												
Type of equipment	927,800 MHz												
	☒	Transmitter unit											
Type of station	☒	Receiver unit											
	Portable station												
Mounting position	☐	Table top equipment											
	☐	Wall/Ceiling mounted equipment											
	☐	Floor standing equipment											
	☒	Hand-held equipment											
	☐	Other, for example rack mounted, body worn, etc.											
Operating modes	N.	Operating mode of test item											
	1	EUT in continuous transmission at maximum power											

Photos of the test item







Testing period and place

Test Location	DEKRA Testing and Certification S.r.l.
FCC Registration Number	182474
Date (start)	13.11.2025
Date (finish)	13.11.2025

Document history

Report number	Date	Description
R25187401	13.11.2025	First release

List of attachments

Name	Description
Attachment 1	Measurement uncertainty, judgement of compliance and quality manual references

Environmental conditions

The climatic conditions during the tests are within the limits specified by the manufacturer for the operation of the EUT and the test equipment.

The climatic conditions during the tests were within the following limits:

Temperature	Humidity	Atmospheric pressure
15 °C – 35 °C	30 % - 60 %	800 hPa – 1060 hPa

If explicitly required in the basic standard or applied product standard the climatic values are recorded and documented separately in this test report.

Environmental conditions have been monitored with the following instruments:

Id. number	Manufacturer	Model	Serial number	Description	Last calibration date	Calibration expiration
CMC S302	Testo	175H1	40370182 610	Data Logger	May 2025	May 2026

Remarks and comments

Throughout this report a comma is used as the decimal separator.

Deviations from test specification

None.

Testing verdicts

N/A (Not Applicable)	Test case does not apply to the test object
P (Pass)	Test object meets the requirement
F (Fail)	Test object does not meet the requirement
N/E (Not Executed)	Test object was not evaluated for the requirement

Verdict summary

KDB 447498 D01 General RF Exposure Guidance v06			
Clause	Requirement – Test case	Basic standard	Verdict
4.3.1	RF Exposure Analysis	--	P

Test results

RF Exposure Analysis

Tested by	S. Zanivan
Test date	13.11.2025
Test location (stand)	Laboratory
Basic standard(s)	KDB 447498 D01 cl. 4.3.1 ANSI C63.10
Supplementary information	--

Acceptance limits

Unless specifically required by the published RF exposure KDB procedures, standalone 1-g head or body and 10-g extremity SAR evaluation for general population exposure conditions, by measurement or numerical simulation, is not required when the corresponding SAR Test Exclusion Threshold condition(s), listed below, is (are) satisfied

For 100 MHz to 6 GHz and test separation distances ≤ 50 mm, the 1-g and 10-g SAR test exclusion thresholds are determined by the following

$[(\text{max. power of channel, including tune-up tolerance, mW})/(\text{min. separation distance, mm})] \times (\sqrt{f(\text{GHz})}) \leq 3$ for 1-g SAR and $\leq 7,5$ for 10-g SAR

MHz	5	10	15	20	25	mm
150	39	77	116	155	194	SAR Test Exclusion Threshold (mW)
300	27	55	82	110	137	
450	22	45	67	89	112	
835	16	33	49	66	82	
900	16	32	47	63	79	
1500	12	24	37	49	61	
1900	11	22	33	44	54	
2450	10	19	29	38	48	
3600	8	16	24	32	40	
5200	7	13	20	26	33	
5400	6	13	19	26	32	
5800	6	12	19	25	31	

10-g Extremity SAR Test Exclusion Power Thresholds are 2,5 times higher than the 1-g SAR Test Exclusion Thresholds indicated above.

Duty cycle evaluation

Transmission channel (MHz)	Transmitting cycle duration (ms)	Transmission time (ms)	Graph	Duty cycle
915,05	23,9	56	25187215	0,42

Result

Transmission channel (MHz)	Measured level (dBm)	Corrected level (dBm)	Corrected level (mW)
915,050	15,27	11,51	14,16
921,400	15,14	11,38	13,74
927,800	15,01	11,25	13,34

Remarks: the corrected levels are obtained by applying a correction factor calculated from the duty cycle using the formula $10\log(\text{duty cycle})$. The measured duty cycle is 42%, so applying the formula $10\log(0,42)$ results in a correction factor of -3,76 dB.

Standalone 1-g head or body

Using separation distance of 5 mm with the formula above results:

$$(14,16 \text{ mW} / 5 \text{ mm}) * \sqrt{0,91505 \text{ GHz}} = 2,71 \leq 3$$

Thus for portable use the SAR exclusion condition is fulfilled and SAR evaluation is not required for separation distance of 5 mm or more.

Standalone 10-g extremity

Using separation distance of 5 mm with the formula above results:

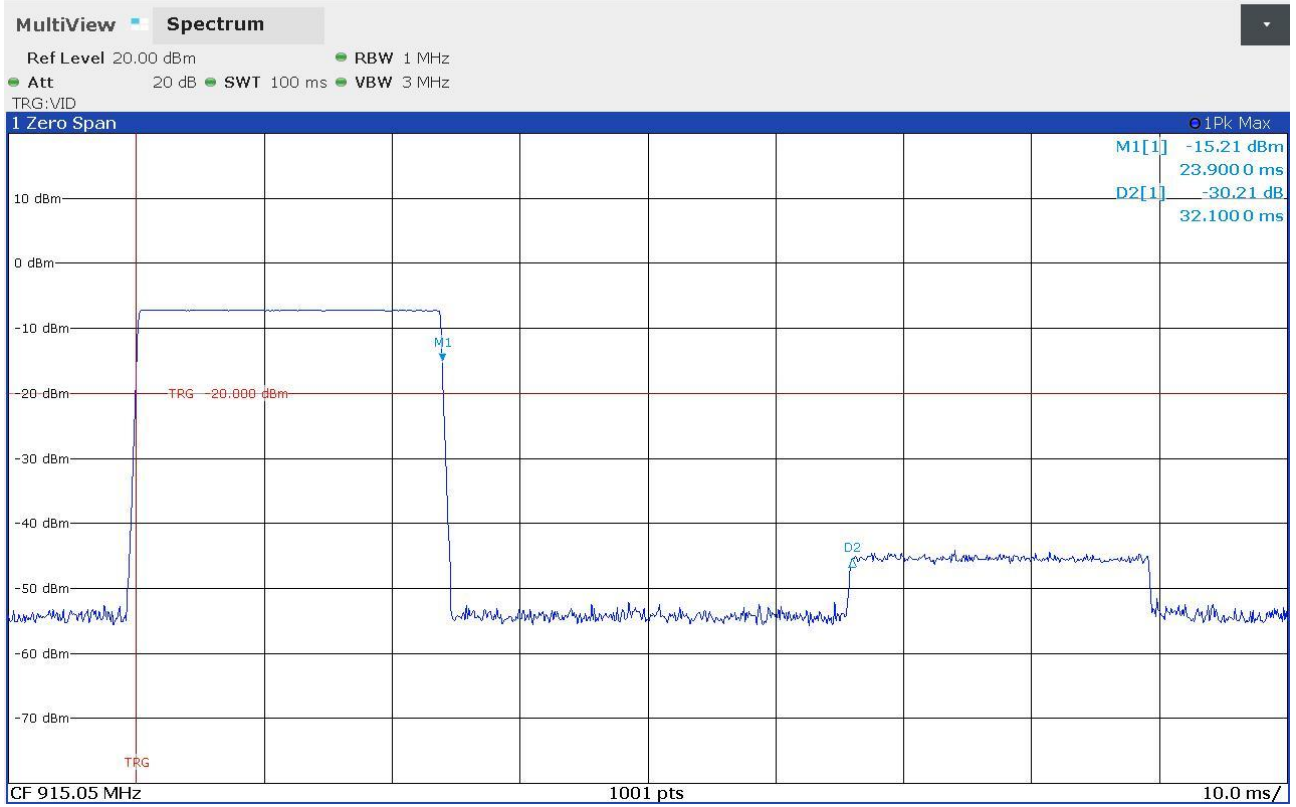
$$(14,16 \text{ mW} / 5 \text{ mm}) * \sqrt{0,91505 \text{ GHz}} = 2,71 \leq 7,5$$

Thus for portable use the SAR exclusion condition is fulfilled and SAR evaluation is not required for separation distance of 5 mm or more.

Remarks: the measured levels have been derived from Test Report nr. R25187201.

Graphs

Zanivan 25187215



Attachment 1

Measurement uncertainty

Test	Test Setup	Expanded uncertainty	Note
Conducted emission CISPR 16 LISN 50uH 0,009-0,0150 MHz	PE001_01	3,5 dB	1
Conducted emission CISPR 16 LISN 50uH 0,150-30,0 MHz	PE001_01	2,9 dB	1
Conducted emission CISPR 16 Voltage Probe 0,15-30 MHz	PE001_02	2,2 dB	1
Conducted emission CISPR 16 Current Probe 0,15-30 MHz	PE001_03	2,5 dB	1
Conducted emission CISPR 16 ISN 0,15-30 MHz	PE001_04	4,7 dB	1
Clc CISPR 16 LISN 50uH 0,150-30,0 MHz	PE001_05	2,9 dB	1
Radiated Emission CDNE 30-300 MHz	PE001_06	3,3 dB	1
Disturbance Power 30-300 MHz	PE002_X1	3,8 dB	1
Radiated Emission LAS 0,15-30 MHz	PE003_01	2,0 dB	1
Radiated Emission CISPR 16 Loop Ant. 0,15-30 MHz	PE004_X1	4,1 dB	1
Radiated Emission CISPR 16 Bicon. Ant. 30-300 MHz	PE004_X2	4,7 dB	1
Radiated Emission CISPR 16 LogP. Ant. 300-1000 MHz	PE004_X3	4,6 dB	1
Radiated Emission CISPR 16 Horn Ant. 1-18 GHz	PE004_X4	4,7 dB	1
Human Exposure to electromagnetic fields	PE005_01	16,2 %	1
Harmonics	PE006_01	10 mA + 2,9 %	1
Flicker	PE007_01	3,40 %	1
Radiated Immunity 80 MHz - 6 GHz	PE102_XX	2,43 dB 0,97 V/m a 3V/m	1
Conducted Immunity 0,15 - 230 MHz	PE105_XX	1,26 dB 0,47 V a 3V	1
AC Magnetic field	PE106_01	1,55 % 0,15 A/m a 10A/m	1
Pulse Magnetic field	PE107_01	6,21 % 18,6 A/m a 300A/m	1
Dumped Magnetic field	PE108_01	6,21 % 1,86 A/m a 30A/m	1
Common mode conducted immunity	PE112_01	2,11 % 0,21 V a 10V	1

Test	Test Setup	Expanded uncertainty	Note
Power/Spurious 9kHz-30MHz	PR001_X1	4,1 dB	1
Power/Spurious ERP 30-1000MHz d=10m/3m	PR001_X2+X3	4,8 dB	1
Misura della potenza EIRP 1-18GHz d=3m	PR001_X4+X5	4,7 dB	1
Misura della potenza EIRP 18-40GHz d=3m	PR001_X6	5,1 dB	1
Frequency error	PR002_01+02	$< 1 \times 10^{-7}$	1
Timing zero span (1001pts.)	PR002_01+02	0,2 % SWT	1
Modulation bandwidth	PR002_01+02	$< 1 \times 10^{-7}$	1
Conducted RF power and spurious emission	PR002_01+02	1,1 dB	1
Adjacent channel power	PR002_01+02	1,1 dB	1
Blocking	PR002_01+02	1,1 dB	1

Test	Test Setup	Expanded uncertainty	Note
Electrostatic discharge immunity test	PE101_0X		2
Electrical fast transients / burst immunity test	PE103_0X		2
Surge immunity test	PE104_0X		2
Short interruption immunity test	PE109_01		2
Ring Wave immunity test	PE110_01		2
Low frequency immunity test	PE111_01		2
Dumped Oscillatory immunity test	PE113_01		2
Rev_25_01 date 26/02/2025			

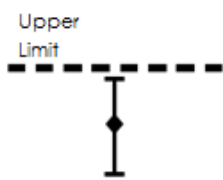
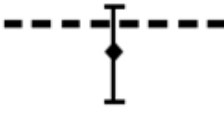
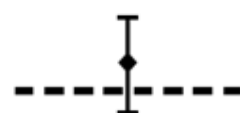
Note 1:

The expanded uncertainty reported according to the document EA-4-02 is based on a standard uncertainty multiplied by a coverage factor of $k=2$, providing a level of confidence of $p = 95\%$

Note 2:

It has been demonstrated that the used test equipment meets the specified requirements in the standard with at least a 95% confidence, covering factor $k=2$

Judgement of compliance

Case 1	Case 2	Case 3	Case 4
 The sample complies with the requirements. The measurement results is within the specification limit when the measurement uncertainty is taken into account.	 The sample complies with the requirements. It is not possible to state compliance using a 95% coverage probability for the expanded uncertainty although the measurement result is below the limit.	 The sample does not comply with the requirements. It is not possible to state compliance using a 95% coverage probability for the expanded uncertainty also the measurement result is upper the limit.	 The sample does not comply with the requirements. The measurement results is outside the specification limit when the measurement uncertainty is taken into account.

In agreement with ILAC-G8:09/2019 cl.4.2.1 Guidelines on Decision Rules and Statements of Conformity

Quality manual references – Internal procedure

Internal Procedure PM001 rev. 4.1 (Quality Manual)	Measure procedure
Internal Procedure INC_M rev. 10.1 (Quality Manual)	Measurement uncertainty calculation