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The Netherlands
Chamber of Commerce
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FCC SAR Exclusion Report

Product name	: Aquarius 2S
Applicant	: Tyro Products B.V.
FCC ID	: SQLRXTX-03

Test report No. : 2009004747 002 FCC RF exposure Ver 2.00

Laboratory information

Accreditation

Telefication complies with the accreditation criteria for test laboratories as laid down in ISO/IEC 17025:2017. The accreditation covers the quality system of the laboratory as well as the specific activities as described in the authorized annex bearing the accreditation number L021 and is granted on 30 November 1990 by the Dutch Council For Accreditation (RvA: Raad voor Accreditatie).

Telefication is designated by the FCC as an Accredited Test Firm for compliance testing of equipment subject to Certification under Parts 15 & 18. The Designation number is: NL0001.

Telefication is a Wireless Device Testing laboratory recognized by Innovation, Science and Economic Development Canada to test to Canadian radio equipment requirements.

Telefication is a registered Conformity Assessment body (CAB) under the Japan-EC MRA (Agreement on Mutual Recognition between Japan and the European Community). The registration number is: 201.

Documentation

The test report must always be reproduced in full; reproduction of an excerpt only is subject to written approval of the testing laboratory. The documentation of the testing performed on the tested devices is archived for 10 years at Telefication Netherlands.

Testing Location

Test Site	Telefication BV
Test Site location	Edisonstraat 12a 6902 PK Zevenaar The Netherlands Tel. +31889983600 Fax. +31316583189

Test Site	Kiwa Telefication BV
Test Site location	Wilmersdorf 50 7327 AC Apeldoorn The Netherlands Tel. +31 88998 3393
Test Site FCC	NL0001

Revision History

Version	Date	Remarks	By
v1.00	20-02-2021	Release version	RvB
V2.00	15-04-2021	Fixed calculation and output power	RvB

Table of Contents

1 General Description

1.1 Applicant

Client name:	Tyro Products B.V.
Address	Bedrijvenpark Twente 299, 7602 KK Almelo
Telephone:	0546 588790
E-mail:	m.krisman@tyroremotes.eu
Contact name:	Mr. M. Krisman

1.2 Manufacturer

Manufacturer name:	Tyro Products B.V.
Address:	Bedrijvenpark Twente 299, 7602 KK Almelo
Telephone:	0546 588790
E-mail:	m.krisman@tyroremotes.eu
Contact name:	Mr. M. Krisman

1.3 Tested Equipment Under Test (EUT)

Product name:	Aquarius 2S
Brand name:	Tyro Remotes
FCC ID:	SQLRXTX-02
Product type:	Remote control receiver
Model(s):	Aquarius 2S
Batch and/or serial No.	--
Software version:	--
Hardware version:	--

1.4 SAR Measurement Evaluation

1.4.1 Maximum Output Power

The maximum radiated power including tune-up tolerance is shown as below.

Mode	Conducted Output power (dBm)	Antenna gain (dBi)	Radiated Output power (dBm)
915 MHz	**13.42**	**5**	**18.42**
915 MHz	**13.42**	**-1.2**	**14.62**

* from Telefication report 191001881 001

1.4.2 SAR Testing Exclusions, Mobile use

Calculation method of RF Safety Distance:

$$PD = \frac{Pout * G}{4\pi r^2}$$

Where:
PD = Power Density in mW/cm^2
Pout = Output power in mW
G = Gain of antenna
R = Distance between observation point and centre of the radiator in cm

Antenna's

Technology	915 MHz
Antenna type	SMA or FLex antenna
Antenna gain	5 dBi or 1.2 dBi

Calculation results

Technology	Frequency (MHz)	Max power (mW)	Antenna gain (numeric)	Distance (cm)	Power density (mW/cm^2)	Limit (mW/cm^2)
915 MHz	902 - 928	21.97	3.16	20	0.014	1.00
915 MHz	902 - 928	21.97	1.31	20	0.0057	1.00

1.5 Summary

According to FCC part 2.1091 the RF exposure limits are met.