

FCC SAR Exclusion Report

Product name : Global Reader Mullion
Applicant : Novar GmbH – Honeywell
Security group
FCC ID : UA2OT3XXXBHON
ISED ID : 6587A-OTXXXBH

Test report No. : 190202012 FCC RF exposure Ver 1.0

Laboratory information

Accreditation

Telefication complies with the accreditation criteria for test laboratories as laid down in ISO/IEC 17025:2005. 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.
The Industry Canada registration number for the 3 meter test chamber of Telefication is: 4173A-1.

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

Revision History

Version	Date	Remarks	By
v1.0	19-12-2019	Release version	PvW

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1 General Description

1.1 Applicant

Client name:	Novar GmbH – Honeywell Security Group
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1.2 Manufacturer

Manufacturer name:	Novar GmbH – Honeywell Security Group
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1.3 Tested Equipment Under Test (EUT)

Product name:	Global Reader Mullion
Brand name:	Novar/Honeywell
FCC ID:	UA2OT3XXBHON
IC ID:	6587A-OTXXXBH
Product type:	Wireless card reader
Model(s):	See next page
Batch and/or serial No.	--
Software version:	--
Hardware version:	--

1.4 SAR Measurement Evaluation

1.4.1 SAR Testing Exclusions

Calculation method of RF Safety Distance:

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

Where:

PD = Power Density in W/m^2

Pout = Output power in mW

G = Gain of antenna

R = Distance between observation point and centre of the radiator in cm

Antenna

Technology	LF (134 kHz)	HF (13.56 MHz)	BLE
Antenna type	PCB loop antenna	PCB loop antenna	Ceramic chip antenna
Antenna gain	NA	NA	0.5 dBi

Calculation results

Technology	Frequency (MHz)	Max power (mW)	Antenna gain (numeric)	Distance (cm)	Power density (mW/cm^2)	Limit (mW/cm^2)	MPE ratio	MPE ratio limit
BLE	2400-2483.5	0.36	1.1	20	0.00008	1.0	0.00008	≤ 1.0

Technology	Frequency (MHz)	Max field strength (dB μ V/m)	Distance (cm)	Field strength @ 0.02m (V/m) ¹	Limit (V/m)	MPE ratio	MPE ratio limit
LF RFID	0.134	-4.59 @ 300m	3	0.009	No requirement in this frequency range		
HF RFID	13.56	47.78 @ 30m	3	0.37	60.8	0.006	≤ 1.0

Note 1: calculations made assuming far field behaviour

1.5 Summary

Since the exposure to RF radiation is lower than the Maximum Permissible Exposure for general population/uncontrolled exposure, no SAR testing is required.