



F2 Labs
16740 Peters Road
Middlefield, Ohio 44062
United States of America
www.f2labs.com

SAR EXEMPTION REPORT

Manufacturer: Deister Electronic GmbH
11 Hermann Bahlsen Str
Barsinghausen D-30890
GERMANY

Applicant: Deister Electronics USA, Inc.
8576 Wellington Road
Manassas, Virginia 20109 USA

Product Name: Deister Electronics Wireless Door Lock Controller

Product Description: Device connects either wired or wirelessly to a Physical Access Control System and provides full function Door Control and Status Monitoring

Model: WCU2

FCC ID: IXLWCU2

Standard(s):

- KDB447498 D04 Interim General RF Exposure Guidance v01
- FCC Rule Part 1.1307(b)(3)(i)(a)

Report Constructed by: Julius Chiller, Senior Wireless Project Engineer

Report Reviewed by: Ken Littell, Vice President of Operations

F2 Labs
26501 Ridge Road
Damascus, MD 20872
Ph 301.253.4500

F2 Labs
16740 Peters Road
Middlefield, OH 44062
Ph 440.632.5541

F2 Labs
8583 Zionsville Road
Indianapolis, IN 46268
Ph 317.610.0611

This test report may be reproduced in full; partial reproduction only may be made with the written consent of F2 Labs. The results in this report apply only to the equipment tested.



TABLE OF CONTENTS

1	<u>ADMINISTRATIVE INFORMATION</u>
2	<u>SUMMARY OF TEST RESULTS/MODIFICATIONS</u>
3	<u>ENGINEERING STATEMENT</u>
4	<u>EUT INFORMATION AND DATA</u>



1 ADMINISTRATIVE INFORMATION

1.1 Measurement Location:

F2 Labs in Middlefield, Ohio. Site description and attenuation data are on file with the FCC's Sampling and Measurement Branch at the FCC Laboratory in Columbia, MD.

1.2 Document History

Document Number	Description	Issue Date	Approved By
F2P29127-03E	First Issue	2023-05-25	K. Littell



2 SUMMARY OF RESULTS

	Standard(s)	Results
SAR Exemption	- KDB447498 D04 Interim General RF Exposure Guidance v01 - FCC Rule Part 1.1307(b)(3)(i)(a)	Complies

Modifications Made to the Equipment
None



3 ENGINEERING STATEMENT

This report has been prepared on behalf of Deister Electronics USA, Inc., to provide documentation for the SAR Exemption herein. This equipment has been tested and found to comply with the SAR Exemption levels listed in FCC Rule Part 1.1307(b)(3)(i)(a).

(3) Determination of exemption.

(i) For single RF sources (i.e., any single fixed RF source, mobile device, or portable device, as defined in paragraph (b)(2) of this section): A single RF source is exempt if:

(A) The available maximum time-averaged power is no more than 1 mW, regardless of separation distance. This exemption may not be used in conjunction with other exemption criteria other than those in paragraph (b)(3)(ii)(A) of this section. Medical implant devices may only use this exemption and that in paragraph (b)(3)(ii)(A);”

The minimum distance from the antenna used inside of the WCU2 RFID Reader, is 5mm. The maximum Field Strength of the transmitter was 34.25dB μ V/m at 3m which converts to -72.75 dBm, or 0.00005 μ W, which is well below the exemption limit of 1mW.



4 EUT INFORMATION AND DATA

4.1 Equipment Under Test:

Product: **RFID Reader**

Model: **WCU2**

Serial No.: 32584

Firmware: Version L99_1.72

Hardware: Version S-8581

FCC ID: IXLWCU2

4.2 Trade Name:

Deister Electronics USA, Inc.

4.3 Power Supply:

24VDC

4.4 Applicable Rules:

KDB447498

4.5 Antenna:

Integral

4.6 Accessories:

Device	Manufacturer	Model Number	Serial Number
Power Supply	BK Precision	1685B	346f17303*

**Indicates F2 Labs-supplied equipment.*