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MPE REPORT

Manufacturer:	**Deister Electronic GmbH** **11 Hermann Bahlsen Str** **Barsinghausen 30890 GERMANY**
Applicant:	**Deister Electronics USA, Inc.** **8576 Wellington Road** **Manassas, Virginia 20109 USA**
Product Name:	**SWH6000PCB**
Product Description:	SWH6000PCB Access Control Reader Module
Model(s):	**SWH6000PCB, KPD3, PRD3**
FCC ID:	**I IXLSWH6000PCB**
Testing Commenced:	2021-10-05
Testing Ended:	2023-05-05
Test Results:	**In Compliance** The EUT complies with the EMC requirements when manufactured identically as the unit tested in this report, including any required modifications. Any changes to the design or build of this unit subsequent to this testing may deem it non-compliant.

Standards:

- **KDB447498**
- **FCC 1.1310**

**Full testing conducted on model SWH6000PCB; limited testing on KPD3 as representative between it and PRD3.*

Evaluation Conducted by:

Julius Chiller, Senior Wireless Project Engineer

Report Reviewed by:

Ken Littell, Vice President of Operations

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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 Measurement Procedure:

All measurements were performed according to:

- KDB558074
- FCC 15.209

1.4 Document History

Document Number	Description	Issue Date	Approved By
F2P21386-R2-03E	First Issue	2024-10-03	K. Littell

2 SUMMARY OF TEST RESULTS

Test Name	Standard(s)	Results
RF Exposure for Device >20cm from Human	KDB447498 FCC 1.1310	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 calculations described herein, based on the measurements taken in supporting Test Reports. This equipment has been tested and calculations were found to comply with KDB447498 and FCC 1.1310. The test results found in this test report relate only to the item(s) tested.

4 EUT INFORMATION AND DATA

4.1 Equipment Under Test:

Product: **Access Control Reader Module**
Model(s): **SWH6000PCB, KPD3, PRD3**
Serial No(s).: SWH6000PCB: 3246400133 (13.56); 3246400134 (125kHz)
PRD3: 3246401286 (125kHz); 3246401287 (13.56 MHz)
Firmware/Software Version(s): F27
FCC ID: **IXLSWH6000PCB**

4.2 Trade Name:

Deister Electronics USA, Inc.

4.3 Power Supply:

7-24VDC from external power supply

4.4 Applicable Rules:

- KDB447498
- FCC 1.1310

4.5 Antenna:

Inductgor Antenna

4.6 Accessories:

Testing Conducted on SWH6000PCB - DC Supply: BK Precision 1685B, s/n 7611-3204-1010

Testing Conducted on PRD3 - DC Supply: BK Precision 1685B, s/n 346F17303*
**Indicates F2 Labs-supplied equipment*

4.7 Test Item Condition:

The equipment to be tested was received in good condition.

5 RF EXPOSURE FOR DEVICE >20cm FROM HUMAN

5.1 Requirements: Distance used is 20cm

$P(dBm)=E(dBuVm/)+20LOG(d)-G-104.77$

21.0 + 9.542425 + 0 - 104.77 = -74.23dBm

$P(dBm)=-74.23$ *which is* **0.000000038*mW* for 13.56 MHz**

55.0 + 9.542425 + 0 - 104.77 = - 40.23dBm

$P(dBm)=-40.23$ *which is* **0.000095*mW* for 125kHz**

Combined Power is 0.000095038mW and is far less than 1mW and is exempt from the RF Exposure at any distance.