TEST REPORT

Product Name : DataHub

Model Number : DataHub1000

Prepared for	:	SolaX Power Network Technology (Zhejiang) Co., Ltd.
Address	:	No.288, Shizhu Road, Tonglu Economic Development Zone, Tonglu City, Zhejiang Province 310000,P. R. CHINA
Prepared by	:	EMTEK (NINGBO) CO., LTD.
Address	:	1F Building 4, 1177#, Lingyun Road, Ningbo National Hi-Tech Zone, Ningbo, Zhejiang, China. Tel: +86-574-27907998 Fax: +86-574-27721538
Report Number	:	ENB2111250113W00902R
Date(s) of Tests	:	November 25, 2021 to January 22, 2022
Date of issue	:	January 27, 2022

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1. TEST RESULT CERTIFICATION

Applicant	:	SolaX Power Network Technology (Zhejiang) Co., Ltd.
Address	:	No.288, Shizhu Road, Tonglu Economic Development Zone, Tonglu City, Zhejiang Province 310000,P. R. CHINA
Manufacturer	:	SolaX Power Network Technology (Zhejiang) Co., Ltd.
Address	:	No.288, Shizhu Road, Tonglu Economic Development Zone, Tonglu City, Zhejiang Province 310000,P. R. CHINA
EUT	:	DataHub
Model Name	:	DataHub1000
Trademark	:	SolaX Power

Test Procedure Used:

Radio communications (Electromagnetic Radiation-Human Exposure) Standard -2014
AS/NZS 2772.2:2016 standard: Part 2: Principles and methods of measurement and computation—3 kHz to 300 GHz
ARPANSA standard: radiation protection standard for Maximum Exposure Levels to Radiofrequency Fields —3 kHz to 300 GHz

The device described above is tested by EMTEK (NINGBO) CO., LTD. to determine the maximum emission levels emanating from the device and the severe levels of the device can endure and its performance criterion. This report shows the EUT to be technically compliant with Radio communications Standard 2014 and the ARPANSA standard requirements. The test results are contained in this report and EMTEK (NINGBO) CO., LTD. is assumed full responsibility for the accuracy and completeness of these tests.

This report applies to above tested sample only and shall not be reproduced in part without written approval of EMTEK (NINGBO) CO., LTD.

Date of Test : November 25, 2021 to January 22, 2022

Prepared by : June Gao /Editor

Reviewer : Vinay /Supervisor

Approve & Authorized Signer : Tony Wei/Manager

2. EUT DESCRIPTION

Product:	DataHub
Model Number:	DATAHUB1000
Sample Number:	1#
WLAN Supported:	☒802.11b ☒802.11g ☒802.11n(20MHz channel bandwidth) ☐802.11n(40MHz channel bandwidth)
Modulation:	☒DSSS with DBPSK/DQPSK/CCK for 802.11b ☒OFDM with BPSK/QPSK/16QAM/64QAM for 802.11g/n
Frequency Range:	☒2412-2472MHz for 802.11b/g/n(HT20) ☐2422-2462MHz for 802.11n(HT40)
Number of Channels:	☒13 Channels for 802.11b/g/n(HT20) ☐9 Channels for 802.11n(HT40)
Max Transmit Power:	18.68 dBm
Antenna:	External antenna
Antenna Gain:	5.0 dBi,
Test Voltage:	AC230V, 50Hz
AC Adapter:	M/N: ABT020120D Input: AC 100-240V, 50/60Hz, 1.5A Output: DC 12V, 2A, 24W
Date of Received:	November 25, 2021
Temperature Range:	-20℃~+60℃

Modified History

Version	Summary	Date of Rev.	Report No.
/	Original Report	/	ENB2111250113W00902R

3. FACILITIES AND ACCREDITATIONS

3.1 FACILITIES

All measurement facilities used to collect the measurement data are located at

1F Building 4, 1177#, Lingyun Road, Ningbo National Hi-Tech Zone, Ningbo, Zhejiang, China.
The sites are constructed in conformance with the requirements of ANSI C63.7, ANSI C63.10 and CISPR Publication 32.

3.2 EQUIPMENT

Radiated emissions are measured with one or more of the following types of linearly polarized antennas: tuned dipole, biconical, log periodic, bi-log, and/or ridged waveguide, horn. Spectrum analyzers with preselectors and quasi-peak detectors are used to perform radiated measurements.

Conducted emissions are measured with Line Impedance Stabilization Networks and EMI Test Receivers.

Calibrated wideband preamplifiers, coaxial cables, and coaxial attenuators are also used for making measurements.
All receiving equipment conforms to CISPR Publication 16-1, “Radio Interference Measuring Apparatus and Measurement Methods.”

3.3 LABORATORY ACCREDITATIONS AND LISTINGS

Site Description
EMC Lab. : **Accredited by CNAS**
The Certificate Registration Number is L6666.
The Laboratory has been assessed and proved to be in compliance with CNAS-CL01:2018 (identical to ISO/IEC 17025:2017)

Accredited by FCC
Designation Number: CN1302
Test Firm Registration Number: 436491

Accredited by A2LA
The certificate is valid until May 31, 2023

Accredited by Industry Canada
The Conformity Assessment Body Identifier is CN0114

Name of Firm : EMTEK (NINGBO) CO., LTD.
Site Location : 1F Building 4, 1177#, Lingyun Road, Ningbo National Hi-Tech Zone, Ningbo, Zhejiang, China.

4. GENERAL PRODUCT INFORMATION

4.1 Product Function and Intended Use

The submitted sample is wireless transceiver includes transmitter and receiver.

4.2 Ratings and System Details

Operating Mode(s) & Operating Frequency Range(s):	☒2412-2472MHz for 802.11b/g/n(HT20) ☐2422-2462MHz for 802.11n(HT40)
Test Modulation:	☒DSSS with DBPSK/DQPSK/CCK for 802.11b ☒OFDM with BPSK/QPSK/16QAM/64QAM for 802.11g/n
Transmit Power EIRP (MAX):	18.68 dBm
Power supply:	AC 230V, 50Hz
Type of Antenna:	External antenna
Antenna Gain:	5.0 dBi

5. TEST RESULT

5.2 MPE Evaluation

S =PG* Duty factor / 4πR²
P = AV Power Input to antenna (Watts)
G =Antenna Gain (numeric)
R = distance to the center of radiation of antenna (in meter) = 0.20 m
Note:
1) P (Watts)=(10 ^ (dBm /10))/1000
2) G (Antenna gain in numeric) = 10^ (Antenna gain in dBi /10)
3) Duty factor

Mode	Duty factor
TX	0.99

4) π=3.142

5.3 Measurement of RF conducted Power

Mode	AV Power
TX	18.68 dBm

5.4 Summary of Results

The maximum power density at a distance of 0.5 m for EUT is shown as below:

WIFI

Antenna Gain(dBi)	Antenna Gain (numeric)	AV Output Power (dBm)	AV Output Power (W)	Duty factor	Calculated RF Exposure (W/m²)	Limit (W/ m²)
5.0	3.16	18.68	0.07379	0.99	0.4638	10

5.5 Measurement Uncertainty

Extended Uncertainty (k=2) 95% 0.5dB

*** End of Report ***

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Objections shall be raised within 20 days from the date receiving the report.