

RF EXPOSURE REPORT

Applicant	Hoymiles Converter Technology Co., Ltd.
Address	No. 18 Kangjing Road, HangZhou, Zhejiang Province



Manufacturer or Supplier	Hoymiles Converter Technology Co., Ltd.
Address	No. 18 Kangjing Road, HangZhou, Zhejiang Province
Product	Data Logger
Brand Name	 hoymiles
Model	DTU-W100
Additional Model & Model Difference	N/A
Date of tests	Oct. 19, 2018 ~ Dec. 13, 2018

☒ **FCC Part 2 (Section 2.1091)**

☒ **KDB 447498 D01**

☒ **IEEE C95.1**

CONCLUSION: The submitted sample was found to COMPLY with the test requirement

Tested by Breeze Jiang Project Engineer / EMC Department	Approved by Glyn He Supervisor / EMC Department
	 Date: Dec. 26, 2018

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Test Report No.: FM181019N017

RELEASE CONTROL RECORD


ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
FM181019N017	Original release	Dec. 26, 2018

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1. CERTIFICATION

FCC ID:	2ARNB-DTUW100
PRODUCT:	Data Logger
BRAND NAME:	 hoymiles
MODEL NO.:	DTU-W100
ADDITIONAL NO.:	N/A
TEST SAMPLE:	Engineering Sample
APPLICANT:	Hoymiles Converter Technology Co., Ltd.
STANDARDS:	FCC Part 2 (Section 2.1091)
	KDB 447498 D01
	IEEE C95.1

2. RF EXPOSURE LIMIT

LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

FREQUENCY RANGE (MHz)	ELECTRIC FIELD STRENGTH (V/m)	MAGNETIC FIELD STRENGTH (A/m)	POWER DENSITY (mW/cm ²)	AVERAGE TIME (minutes)
LIMITS FOR GENERAL POPULATION / UNCONTROLLED EXPOSURE				
300-1500	F/1500	30
1500-100,000	1.0	30

F = Frequency in MHz

3. MPE CALCULATION FORMULA

$$P_d = (P_{out} \cdot G) / (4 \cdot \pi \cdot r^2)$$

where

P_d = power density in mW/cm²

P_{out} = output power to antenna in mW

G = gain of antenna in linear scale

π = 3.1416

R = distance between observation point and center of the radiator in cm

4. CLASSIFICATION

The antenna of this product, under normal use condition, is at least 20cm away from the body of the user. So, this device is classified as **Mobile Device**.

5. ANTENNA GAIN

The antennas provided to the EUT, please refer to the following table:

Transmitter Circuit	Peak Gain (dBi)	Antenna Type
Chain 0	0.5	Ceramic Antenna

6. CALCULATION RESULT OF MAXIMUM CONDUCTED POWER

The tuned conducted Average Power (declared by client)

Mode	Frequency (MHz)	Target Power (dBm)	Tolerance (dBm)	Lower Tolerance (dBm)	Upper Tolerance (dBm)
802.11b	2412-2462	12	+-2	10	14
802.11g	2412-2462	11	+-3	8	14
802.11n(HT20)	2412-2462	9	+-3	6	12
802.11n(HT40)	2422-2452	8	+-4	4	12

The measured conducted Average Power

Mode	Frequency (MHz)	Averaged Power (dBm)
802.11b	2412	12.68
802.11g	2437	12.62
802.11n(HT20)	2437	10.91
802.11n(HT40)	2437	10.87

FREQUENCY BAND (MHz)	MAX AVERAGE POWER (dBm)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/cm ²)	LIMIT (mW/cm ²)
2412-2462	14	0.5	20	0.005607	1.0

--- END ---