

RF EXPOSURE REPORT

Applicant	Schneider Electric Industries SAS
Address	31 rue Pierre Mendes France, Eybens Grenoble cedex 9, 38050 France

Manufacturer or Supplier	Schneider Electric Industries SAS
Address	31 rue Pierre Mendes France, Eybens Grenoble cedex 9, 38050 France
Product	Energy Sensor
Brand Name	
Model	A9MEM1590
Additional Model & Model Difference	A9MEM1591, A9MEM1592, A9MEM1593, see items 1.1
Date of tests	Nov. 29, 2019 ~ Mar. 27, 2020

☒ FCC Part 2 (Section 2.1091)

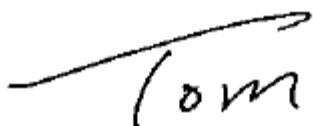
☒ KDB 447498 D01

☒ IEEE C95.1

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

Tested by Tom Chen
Project Engineer / EMC Department

Approved by Glyn He
Assistant Manager/ EMC Department




Date: May 22, 2020

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TABLE OF CONTENTS

RELEASE CONTROL RECORD	3
1. CERTIFICATION.....	4
2. RF EXPOSURE LIMIT	5
3. MPE CALCULATION FORMULA.....	5
4. CLASSIFICATION	5
5. ANTENNA GAIN	6
6. CALCULATION RESULT OF MAXIMUM CONDUCTED POWER.....	6

RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
FM191129N012	Original release	May 11, 2020
FM200421N030	Based on the original report FM191129N012 changed the address of applicant/ manufacturer, FCC ID, brand name and model No., but it doesn't need to be retested.	May 22, 2020

1. CERTIFICATION

FCC ID:	2AH7L-MEM159X
PRODUCT:	Energy Sensor
BRAND NAME:	
MODEL NO.:	A9MEM1590
ADDITIONAL NO.:	A9MEM1591, A9MEM1592, A9MEM1593
TEST SAMPLE:	Engineering Sample
APPLICANT:	Schneider electric industries SAS
STANDARDS:	FCC Part 2 (Section 2.1091)
	KDB 447498 D01
	IEEE C95.1

NOTES:

1. Additional models (see about table) are identical with the test model A9MEM1590 except the model name for trading purpose

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

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

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	2.5	PCB Antenna

6. CALCULATION RESULT OF MAXIMUM CONDUCTED POWER

The tuned conducted Average Power (declared by client)

Frequency (MHz)	Target Power (dBm)	Tolerance (dBm)	Lower Tolerance (dBm)	Upper Tolerance (dBm)
2405-2480	7	+2	5	9

The measured conducted Average Power

Frequency (MHz)	Averaged Power (dBm)
2405	7.29

FREQUENCY BAND (MHz)	MAX AVERAGE POWER (dBm)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/cm ²)	LIMIT (mW/cm ²)
2405-2480	9	2.5	20	0.00281	1.0

--- END ---