

# RF EXPOSURE REPORT

|           |  |
|-----------|--|
| Applicant | Zhongshan Pulido Intelligent Technology Co., Ltd   |
| Address   | No.30 Taiyu road, the 2nd Industry, Jidongertaifeng district, Xiaolan Town, Zhongshan City, 528415 |



|                                     |  |
|-------------------------------------|--|
| Manufacturer or Supplier            | Zhongshan Pulido Intelligent Technology Co., Ltd   |
| Address                             | No.30 Taiyu road, the 2nd Industry, Jidongertaifeng district, Xiaolan Town, Zhongshan City, 528415 |
| Product                             | Smart Padlock  |
| Brand Name                          | N/A  |
| Model                               | P02TY  |
| Additional Model & Model Difference | P02, SY13, SY13T, GN-WA018-101M;   |
| Date of tests                       | Jan. 24, 2024 ~ Feb. 01, 2024  |

☒ **FCC Part 2 (Section 2.1093)**

☒ **KDB 447498 D01 V06**

☒ **IEEE C95.1**

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

|   |  |
|---|--|
| Tested by Eric Fang<br>Project Engineer / EMC Department                            | Approved by Glyn He<br>Assistant Manager / EMC Department                            |
|  |  |
|   | Date: Mar. 13, 2024  |

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Test Report No.: FM2401WDG0191

## RELEASE CONTROL RECORD

| ISSUE NO.     | REASON FOR CHANGE | DATE ISSUED   |
|---------------|-------------------|---------------|
| FM2401WDG0191 | Original release  | Mar. 13, 2024 |

## 1. CERTIFICATION

|                        |  |
|------------------------|--|
| <b>FCC ID:</b>         | 2A8M4-P02TY                                      |
| <b>PRODUCT:</b>        | Smart Padlock                                    |
| <b>BRAND NAME:</b>     | N/A  |
| <b>MODEL NO.:</b>      | P02TY  |
| <b>ADDITIONAL NO.:</b> | P02, SY13, SY13T, GN-WA018-101M                  |
| <b>APPLICANT:</b>      | Zhongshan Pulido Intelligent Technology Co., Ltd |
| <b>STANDARDS:</b>      | FCC Part 2 (Section 2.1093)                      |
|                        | KDB 447498 D01 V06                               |
|                        | IEEE C95.1                                       |

- Note:** Additional models (see above table) are identical with the test model P02TY except model number for trading purpose.

## 2. RF EXPOSURE LIMIT

The corresponding SAR Exclusion Threshold condition, listed below:

- 1) The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances  $\leq 50$  mm are determined by:

$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0$  for 1-g SAR and  $\leq 7.5$  for 10-g extremity SAR, 16 where

- $f(\text{GHz})$  is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation
- The result is rounded to one decimal place for comparison

The test exclusions are applicable only when the minimum test separation distance is  $\leq 50$  mm and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is  $< 5$  mm, a distance of 5 mm is applied to determine SAR test exclusion.

- 2) At 100 MHz to 6 GHz and for test separation distances  $> 50$  mm, the SAR test exclusion threshold is determined according to the following:
- a) [Threshold at 50 mm in step 1) + (test separation distance - 50 mm)  $\cdot$  ( $f(\text{MHz})/150$ )] mW, at 100 MHz to 1500 MHz
  - b) [Threshold at 50 mm in step 1) + (test separation distance - 50 mm)  $\cdot$  10] mW at  $> 1500$  MHz and  $\leq 6$  GHz
- 3) At frequencies below 100 MHz, the following may be considered for SAR test exclusion.
- a) The threshold at the corresponding test separation distance at 100 MHz in step 2) is multiplied by  $[1 + \log(100/f(\text{MHz}))]$  for test separation distances  $> 50$  mm and  $< 200$  mm.
  - b) The threshold determined by the equation in a) for 50 mm and 100 MHz is multiplied by  $\frac{1}{2}$  for test separation distances  $\leq 50$  mm.
  - c) SAR measurement procedures are not established below 100 MHz. When SAR test exclusion cannot be applied, a KDB inquiry is required to determine SAR evaluation requirements for any test results to be acceptable.

## 3. CLASSIFICATION

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

## 4. ANTENNA GAIN

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

| Transmitter Circuit | Peak Gain (dBi) | Antenna Type |
|---------------------|-----------------|--------------|
| Chain 0             | -0.47           | PCB Antenna  |

## 5. CALCULATION RESULT OF MAXIMUM CONDUCTED AV POWER

The tuned conducted Average Power (declared by client)

| Mode  | Frequency (MHz) | Target Power (dBm) | Tolerance (dBm) | Lower Tolerance (dBm) | Upper Tolerance (dBm) |
|-------|-----------------|--------------------|-----------------|-----------------------|-----------------------|
| BT-LE | 2402-2480       | 0                  | + -1            | -1                    | 1                     |

The measured conducted Average Power

| Mode  | Frequency (MHz) | Averaged Power (dBm) |
|-------|-----------------|----------------------|
| BT-LE | 2480            | 0.44                 |

### SAR Test Exclusion Thresholds

| Frequency (MHz) | Maximum source-based time averaged conducted output power (dBm) | Minimum separation distance (mm) | Result of Eq. 1 | Limit for 1-g SAR | Limit for 10-g extremity SAR | Verdict         |
|-----------------|---|----------------------------------|-----------------|-------------------|------------------------------|-----------------|
| 2402-2480       | 1   | 5                                | 0.391           | 3.0               | 7.5                          | Exempt from SAR |

### Conclusion

Therefore this device complies with FCC's RF radiation exposure limits for general population without SAR evaluation.

--- END ---