# RF EXPOSURE Test Report

**Product:** PRONEXT DIGITAL CALENDAR

**Trade Mark:** N/A

**Model Number:** GD-DC01

**FCC ID:** 2A92J-GD-DC01

**Prepared for**

Guangzhou Golden Diamond Electric Appliance Co., Ltd

43 Lianglong South Street, Oversea Chinese Science and Technology Industrial Park, Huashan Town, Huadu District, Guangzhou

**Prepared by**

Shenzhen HongBiao Certification& Testing Co., Ltd

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# TEST RESULT CERTIFICATION

| | | |
|---|---|---|
| **Applicant's Name** | : | Guangzhou Golden Diamond Electric Appliance Co., Ltd |
| Address | : | 43 Lianglong South Street, Oversea Chinese Science and Technology Industrial Park, Huashan Town, Huadu District, Guangzhou |
| **Manufacturer's Name** | : | Guangzhou Golden Diamond Electric Appliance Co., Ltd |
| Address | : | 43 Lianglong South Street, Oversea Chinese Science and Technology Industrial Park, Huashan Town, Huadu District, Guangzhou |

**Product description**

| | | |
|---|---|---|
| Product name | : | PRONEXT DIGITAL CALENDAR |
| Model Number | : | GD-DC01 |
| **Standards** | : | FCC CFR 47 PART 1 , 1.1310 |
| Test procedure | : | KDB 447498 D01 General RF Exposure Guidance v06 |

This device described above has been tested by Shenzhen HongBiao Certification& Testing Co., Ltd and the test results show that the equipment under test (EUT) is in compliance with the EMC requirements. And it is applicable only to the tested sample identified in the report.

| | | |
|---|---|---|
| **Date of Test** | : | |
| Date (s) of performance of tests | : | Feb. 20, 2025~ Mar. 04, 2025 |
| Test Result | : | **Pass** |

**Testing Engineer** : Zoe Su

**( Z o e S u )**

**Technical Manager** : Gary Lu

**( G a r y L u )**

**Authorized Signatory** : Leo Su

**( L e o S u )**

## Revision History

| Revised No. | Date of Issue | Description |
|---|---|---|
| 01 | Mar. 05, 2025 | Original |
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# 1 General Description

## 1.1 Description of EUT

| | |
|---|---|
| Product name: | PRONEXT DIGITAL CALENDAR |
| Model name: | GD-DC01 |
| Series Model: | GD-DC02, GD-DC03, GD-DC04, GD-DC05, GD-DC06 |
| Different of series model: | All the models are the same circuit and module, except the color and appearance size. |
| Operation frequency: | 2.4GWiFi: 802.11b/g/n20: 2412~2462 MHz<br>802.11n40: 2422~2452 MHz<br>5GWiFi: U-NII-3: 5745 MHz~5825 MHz |
| Modulation type: | 2.4G WiFi: IEEE 802.11b: DSSS (DBPSK, DQPSK, CCK)<br>IEEE 802.11g/n (HT20/HT40): OFDM<br>(64QAM, 16QAM, QPSK, BPSK)<br>5G WiFi: OFDM with BPSK/QPSK/16QAM/64QAM/256QAM for 802.11a/n/ac; |
| Bit Rate of transmitter: | 2.4G WiFi: 802.11b: 11/5.5/2/1 Mbps<br>802.11g: 54/48/36/24/18/12/9/6Mbps<br>802.11n(20MHz) use 800 ns GI:<br>65.0/58.5/52.0/39.0/26.0/19.5/13.0/6.5 Mbps (MCS0~MCS7)<br>802.11n(40MHz) use 800 ns GI:<br>5G WiFi: 13.5/27/40.5/54/81/108/121.5/135Mbps<br>802.11a: 6,9,12,18,24,36,48,54Mbps;<br>802.11n(HT20/HT40): MCS0-MCS15;<br>802.11ac(VHT20): NSS1, MCS0-MCS8<br>802.11ac(VHT40): NSS1, MCS0-MCS9<br>802.11ac(VHT80): NSS1, MCS0-MCS9 |
| Antenna type: | Built in antenna |
| Antenna gain: | 2.4G WiFi: 2.05dBi<br>5G WiFi: 2.23dBi |
| Max. output power: | 2.4G WiFi: 9.05dBm<br>5G WiFi: 7.48dBm |
| Hardware version: | V1.0 |
| Software version: | V1.0 |
| Battery: | DC 7.6V, 4000mAh, 30.4Wh |
| Power supply: | DC 12V from adapter AC 120V/60Hz |
| Adapter information: | Model: YQ-1203000Z<br>Input: 100-240V~50/60Hz 700mA |

| | |
|---|---|
| | Output: 12V⎓3000mA |

## 1.2 Test Mode

| Pretest Test Mode | Description of Mode |
|---|---|
| 1 | TX |
| 2 | / |
| 3 | / |

## 1.3 Test Setup

See photographs of the test setup in the report for the actual setup and connections between EUT and support equipment.

## 1.4 Ancillary Equipment

| Equipment | Model | S/N | Manufacturer |
|---|---|---|---|
| / | / | / | / |
| | | | |
| | | | |
| | | | |

# 2 Test Facilities and Accreditations

## 2.1 Test Laboratory

| | |
|---|---|
| Test Site | Shenzhen HongBiao Certification& Testing Co., Ltd |
| Test Site Location | Room 102, 201, Building 2, Yuanwanggu RFID Industrial Park, Tongguan Road, Tianliao Community, Yutang Street, Guangming District, Shenzhen, China |
| Telephone: | (86-755) 2998 9321 |
| Fax: | (86-755) 2998 5110 |
| FCC Registration No.: | CN1341 |
| A2LA Certificate No.: | 6765.01 |

## 2.2 Environmental Conditions

During the measurement the environmental conditions were within the listed ranges:

| | |
|---|---|
| Temperature: | 15ºC~35ºC |
| Relative Humidity: | 20%~75% |
| Air Pressure: | 98kPa~101kPa |

## 2.3 Measurement Uncertainty

The reported uncertainty of measurement y ± U, where expended uncertainty U is based on a standard uncertainty multiplied by a coverage factor of k=2, providing a level of confidence of approximately 95 %.
The data and results quoted in this document are true and accurate values, and uncertainties are not involved in the calculations.
In addition, components and mass production processes that are similar to testing equipment may introduce additional deviations, and the manufacturer is solely responsible for the continued compliance of the equipment.

| Measurement Frequency Range | U, (dB) | Note |
|---|---|---|
| RF frequency | 2x $10^{-5}$ | |
| RF power, conducted | ± 0.57 dB | |
| Temperature | ±1 degree | |
| Humidity | ± 5 % | |

## 2.4 Test Software

| Software name | Manufacturer | Model | Version |
|---|---|---|---|
| RF Test System | MWRF | MTS 8310 | V2.0.0.0 |

# 3 List of Test Equipment

| RF | | | | | | | |
|---|---|---|---|---|---|---|---|
| Item | Equipment No. | Equipment name | Manufacturer | Model | Serial No. | Calibration date | Due date |
| 1 | HB-E041 | MXG Anaiog Signal Generator | Agilent | N5181A | MY47070421 | 2024-05-17 | 2025-05-16 |
| 2 | HB-E042 | WIDEBAND RADIO COMMUNICATION TESTER | R&S | CMW500 | 132108 | 2024-05-17 | 2025-05-16 |
| 3 | HB-E043 | MXG Anaiog Signal Generator | Agilent | N5182A | US46240335 | 2024-05-17 | 2025-05-16 |
| 4 | HB-E044 | Signal& spectrum Analyzer | R&S | FSV3044 | 101264 | 2024-05-17 | 2025-05-16 |
| 5 | HB-E045 | RF Control Box | Noyetec | NY100-RFCB | N/A | / | / |
| 6 | HB-E058 | Thermometer Clock Humidity Monitor | N/A | HTC-1 | N/A | / | / |

Note: the calibration interval of the above test instruments is 12 months and the calibrations are traceable to international system unit (SI).

# 4 RF Exposure

## 4.1 Standalone SAR test exclusion considerations

### 4.1.1. Limit

3.0 for 1g SAR.

### 4.1.2. Test Procedures

Unless specifically required by the published RF exposure KDB procedures, standalone 1-g head or body and 10-g extremity SAR evaluation for general population exposure conditions, by measurement or numerical simulation, is not required when the corresponding SAR Test Exclusion Threshold condition(s), listed below, is (are) satisfied.

These test exclusion conditions are based on source-based time-averaged maximum conducted output power of the RF channel requiring evaluation, adjusted for tune-up tolerance, and the minimum test separation distance required for the exposure conditions.

The minimum test separation distance defined in 4.1 f) is determined by the smallest distance from the antenna and radiating structures or outer surface of the device, according to the host form factor, exposure conditions and platform requirements, to any part of the body or extremity of a user or bystander.

To qualify for SAR test exclusion, the test separation distances applied must be fully explained and justified, typically in the SAR measurement or SAR analysis report, by the operating configurations and exposure conditions of the transmitter and applicable host platform requirements, according to the required published RF exposure KDB procedures.

When no other RF exposure testing or reporting are required, a statement of justification and compliance must be included in the equipment approval, in lieu of the SAR report, to qualify for SAR test exclusion.

When required, the device specific conditions described in the other published RF exposure KDB procedures must be satisfied before applying these SAR test exclusion provisions.

a) For 100 MHz to 6 GHz and test separation distances ≤ 50 mm, the 1-g and 10-g SAR test exclusion thresholds are determined by the following:

[(max. power of channel, including tune-up tolerance, mW) / (min. test separation distance, mm)] · [√f(GHz)] ≤ 3.0 for 1-g SAR, and ≤ 7.5 for 10-g extremity SAR, where

- $f_{(GHz)}$ 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 values 3.0 and 7.5 are referred to as *numeric thresholds* in step b) below

The test exclusions are applicable only when the minimum test separation distance is ≤ 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 according to 4.1 f) is applied to determine SAR test exclusion.

b) For 100 MHz to 6 GHz and test separation distances > 50 mm, the 1-g and 10-g SAR test exclusion thresholds are determined by the following (also illustrated in Appendix B):

   1) {[Power allowed at *numeric threshold* for 50 mm in step a)] + [(test separation distance – 50 mm)·(f(MHz)/150)]} mW, for 100 MHz to 1500 MHz

   2) {[Power allowed at *numeric threshold* for 50 mm in step a)] + [(test separation distance – 50 mm)·10]} mW, for > 1500 MHz and ≤ 6 GHz

c) For frequencies below 100 MHz, the following may be considered for SAR test exclusion (also illustrated in Appendix C):

1) For test separation distances > 50 mm and < 200 mm, the power threshold at the corresponding test separation distance at 100 MHz in step b) is multiplied by [1 + log(100/f(MHz))]
2) For test separation distances ≤ 50 mm, the power threshold determined by the equation in c) 1) for 50 mm and 100 MHz is multiplied by ½
3) 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 SAR test results below 100 MHz to be acceptable.

### 4.1.3. Test Result

We use 5mm as separation distance to calculated.

2.4G WiFi (Worst):

| Transmit Frequency (GHz) | Mode | Measured Power (dBm) | Tune-up power (dBm) | Max tune-up power(dBm) | Result calculation | 1g SAR |
|---|---|---|---|---|---|---|
| 2452 | 11n40 | 9.05 | 8.5±1 | 9.5 | 2.7912 | 3 |

5G WiFi (Worst):

| Transmit Frequency (GHz) | Modulation mode | Measured Power (dBm) | Tune-up power (dBm) | Max tune-up power(dBm) | Result calculation | 1g SAR |
|---|---|---|---|---|---|---|
| 5785 | 11a | 7.48 | 6.5±1 | 7.5 | 2.7051 | 3 |

**Conclusion:**

For the max result: 2.7912≤ 3.0 for 1g SAR, No SAR is required.

******** END OF REPORT ********