**EMC Technologies Pty. Ltd.**
ABN 82 057 105 549

**Melbourne**
176 Harrick Road
Keilor Park, Vic 3042
Tel: +61 3 9365 1000

**Sydney**
Unit 3/87 Station Road
Seven Hills, NSW 2147
Tel: +61 2 9624 2777

Email: emc-general@emctech.com.au
Web: www.emctech.com.au

# 47 CFR PART 1.1307

# ACTIONS THAT MAY HAVE A SIGNIFICANT ENVIRONMENTAL EFFECT, FOR WHICH ENVIRONMENTAL ASSESSMENTS (EAS) MUST BE PREPARED.

**REPORT NUMBER: M2111032-4 V2**

**STANDARD: 47 CFR PART 1.1307**

**CLIENT: AUTOMATIC TECHNOLOGY AUSTRALIA PTY.LTD.**

**DEVICE: WIRELESS GARAGE DOOR LOCK**

**MODEL: GDL-200V2**

**DATE OF ISSUE: 12 APRIL 2022**

## REVISION TABLE

| Version | Sec/Para Changed | Change Made | Date |
|---|---|---|---|
| 1 | | Initial issue of document | 07/04/2022 |
| 2 | pp 1, 4, 5,7 | Device name updated to “Wireless Garage Door Lock” | 12/04/2022 |
| | | | |
| | | | |

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# RADIOFREQUENCY RADIATION EXPOSURE EVALUATION REPORT - MPE

| | |
|---|---|
| **Device:** | Wireless Garage Door Lock |
| **Model Number:** | GDL-200V2 |
| **Part Number:** | 100024 |
| **FCC ID:** | FCC ID: X4K-GDLWLK01 |
| **Manufacturer:** | Countermast Technology (Dalian) Co., Ltd. |
| **Inspected for:** | Automatic Technology Australia Pty.Ltd. |
| **Address:** | 6-8 Fiveways Boulevard, Keysborough, Victoria 3173, Australia |
| **Phone Number:** | +61 3 9791 0275 |
| **Contact:** | Nikolai Klepikov |
| **Email:** | Nikolai.Klepikov@ata-aust.com.au |
| **Standards:** | **447498 D04 Interim General RF Exposure Guidance v01**<br>RF Exposure Procedures and Equipment Authorization Policies for Mobile and Portable Devices<br><br>**47 CFR PART 1.1307**<br>Actions that may have a significant environmental effect, for which Environmental assessment (EAs) must be prepared. |
| **Result:** | Based on an assessment of the documentation provided the Wireless Garage Door Lock, model GDL-200V2 is exempted from routine evaluation. Refer to Report M2111032-4 V2 for full details |
| **Assessment Date:** | 7 February 2022 |
| **Assessment Engineer:** | Deborah Olaleye |
| **Authorised Signatory:** | Emad Mansour<br>**EMR/On-Site Project Manager**<br>**EMC Technologies Pty Ltd** |

**Issued by:** EMC Technologies Pty. Ltd.,
176 Harrick Road, Keilor Park, VIC, 3042, Australia.
**Phone:** +61 3 9365 1000
**E-mail:** emc-general@emctech.com.au **Web:** www.emctech.com.au

# 1 INTRODUCTION

This report is intended to demonstrate compliance of the Wireless Garage Door Lock model GDL-200V2 with the RF exposure requirements of 47 CFR PART 1.1307. Evaluation was performed in accordance with KDB 447498 D04 Interim General RF Exposure Guidance v01.

The test sample was provided by the Client. The conclusion herein is based on the information provided by the client.

## 1.1 Laboratory Overview

EMC Technologies Pty. Ltd. is an independently owned Australian company that is NATA accredited to ISO 17025 for both testing and calibration and ISO 17020 for Inspection. – **Accreditation Number 5292.**

## 1.2 Test Laboratory/Accreditations

Inspection was performed at EMC Technologies' laboratory in Keilor Park, Victoria Australia.

*Table 1-1: Accreditations for Conformity Assessment*

| Country/Region | Body | |
|---|---|---|
| Australia/New Zealand | NATA | Accreditation Number: 5292 |
| Europe | European Union | Notified Body Number: 0819 |
| USA | FCC | Designation Number: AU0001 (Melb) |
| Canada | ISED Canada | Company Number: 3569B(Melb) |
| Japan | VCCI | Company Number: 785 |
| Taiwan | BSMI | Lab Code SL2-IN-E-5001R |

# 2 DEVICE DETAILS

(Information supplied by the Client)

The GDL-200V2 is an electro-mechanical device for lock/unlock garage door during open/close operation mode remotely. Lock receives RF signal from the base station, and it opens or closes the door, depending on the operating mode.

**Manufacturer:** Countermast Technology (Dalian) Co., Ltd.
**Inspected Sample:** Wireless Garage Door Lock
**Model Number:** GDL-200V2
**Part Number:** 100024

Transmitter parameters were provided by the customer and are shown below:

*Table 2-1: Transmitter Parameters*

| Transmitter #1 | |
|---|---|
| **Wireless Interface:** | GDL-200V2 (Wireless Electro-mechanical Lock) |
| **Operating Frequency:** | 2405 – 2480 MHz |
| **Max. RF Output Power Level:** | 0dBm |
| **Antenna Type:** | Flex Antenna (p/n 1461530100) |
| **Max Antenna gain:** | 3 dBi |

# 3 EXEMPTIONS FOR SINGLE RF SOURCES

## 3.1 Blanket 1 mW Blanket Exemption

The 1 mW Blanket Exemption of § 1.1307(b)(3)(i)(A) applies for single fixed, mobile, and portable RF sources with available maximum time-averaged power of no more than 1 mW, regardless of separation distance. This exemption shall not be used in conjunction with other exemption criteria other than those for multiple RF sources in paragraph § 1.1307(b)(3)(ii)(A).

## 3.2 MPE-based Exemption

If the separation-distance and effective radiated power (ERP) satisfy the thresholds in Table B.1 [Table 1 of § 1.1307(b)(1)(i)(C)] below, the device exempted from routine evaluation.

| **RF Source Frequency** | | | **Minimum Distance** | | | **Threshold ERP** |
|---|---|---|---|---|---|---|
| $f_L$ MHz | | $f_H$ MHz | $\lambda_L / 2\pi$ | | $\lambda_H / 2\pi$ | W |
| 0.3 | – | 1.34 | 159 m | – | 35.6 m | 1,920 $R^2$ |
| 1.34 | – | 30 | 35.6 m | – | 1.6 m | 3,450 $R^2/f^2$ |
| 30 | – | 300 | 1.6 m | – | 159 mm | 3.83 $R^2$ |
| 300 | – | 1,500 | 159 mm | – | 31.8 mm | 0.0128 $R^2f$ |
| 1,500 | – | 100,000 | 31.8 mm | – | 0.5 mm | 19.2$R^2$ |
| Subscripts L and H are low and high; λ is wavelength. From § 1.1307(b)(3)(i)(C), modified by adding Minimum Distance columns. | | | | | | |

Note: the exemption threshold at 2405 MHz at 20 cm is 768 mW

## 4 RF EXPOSURE CACULATIONS

As the transmitted EIRP is 3 dBm (ERP 0.85 dBm = 1.2 mW) less than 768 mW indicated in section 3.2, hence this transmitter exempted from routine evaluation

## 5 CONCLUSION

Based on an assessment of the documentation provided the Wireless Garage Door Lock, model complies GDL-200V2 is exempted from routine evaluation.

## APPENDIX A

*Referenced Documents*

| Document | Comments |
|---|---|
| Client's email | EUT and Transmitter details |