



Global Product Certification  
EMC-EMF Safety Approvals

**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](mailto:emc-general@emctech.com.au)  
Web: [www.emctech.com.au](http://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: M2111032-7**

**STANDARD: 47 CFR PART 1.1307**

**CLIENT: AUTOMATIC TECHNOLOGY AUSTRALIA PTY LTD**

**DEVICE: WIRELESS BASE STATION MODULE**

**MODEL: GDL2V2**

**DATE OF ISSUE: 7 APRIL 2022**

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## REVISION TABLE

Version	Sec/Para Changed	Change Made	Date
1		Initial issue of document	07/04/2022



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## RADIOFREQUENCY RADIATION EXPOSURE EVALUATION REPORT - MPE

**Device:** Wireless Base Station Module  
**Model Number:** GDL2V2  
**Part Number:** 100036  
**FCC ID:** X4K-GDWLABS01

**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**  
RF Exposure Procedures and Equipment Authorization Policies  
for Mobile and Portable Devices


**47 CFR PART 1.1307**

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 Base Station Module, model GDL2V2 is exempted from routine evaluation. Refer to Report M2111032-7 for full details

**Assessment Date:** 7 February 2022

  
**Assessment Engineer:** Deborah Olaleye

  
**Authorised Signatory:** Emad Mansour  
**EMR/On-Site Project Manager**  
**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](mailto:emc-general@emctech.com.au)

**Web:** [www.emctech.com.au](http://www.emctech.com.au)

## 1 INTRODUCTION

This report is intended to demonstrate compliance of the Wireless Base Station Module, model GDL2V2 with the RF exposure requirements of 47 CFR Part 2.1091. Evaluation was performed in accordance with FCC KDB 447498 D01.

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:** Automatic Technology Australia Pty.Ltd.  
**Inspected Sample:** Wireless Base Station Module  
**Model Number:** GDL2V2  
**Part Number:** 100036

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

Table 2-1: *Transmitter Parameters*

Transmitter #1	
<b>Wireless Interface (1):</b>	ABS1V1-WLK (Base station)
<b>Operating Frequency:</b>	2405 - 2480 MHz
<b>Max. RF Output Power Level:</b>	0 dBm
<b>Antenna Type:</b>	¼ wavelength monopole, soldered to PCB
<b>Max Antenna gain:</b>	-1 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 <sup>2</sup>
1.34	–	30	35.6 m	–	1.6 m	3,450 R <sup>2</sup> /f <sup>2</sup>
30	–	300	1.6 m	–	159 mm	3.83 R <sup>2</sup>
300	–	1,500	159 mm	–	31.8 mm	0.0128 R <sup>2</sup> f
1,500	–	100,000	31.8 mm	–	0.5 mm	19.2R <sup>2</sup>

Subscripts L and H are low and high;  $\lambda$  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 CALCULATIONS

As the transmitted EIRP is -1 dBm (ERP -3.15 dBm = 0.5 mW) less than 1 mW indicated in section 3.1, hence this transmitter is exempted from routine evaluation

#### 5 CONCLUSION

Based on an assessment of the documentation provided the Wireless Base Station Module, model GDL2V2 is exempted from routine evaluation.



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**APPENDIX A***Referenced Documents*

Document	Comments
Client's email	EUT and Transmitter details