

JN5168-RD6040 Compliance Statements Reference Manual

JN-RM-2067 Revision 1.0 10-Oct-2013

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About this Manual

This manual is exclusively concerned with the JN5168-RD6040 IoT Gateway and contains compliance documentation, declarations, statements and grants for the FCC and Industry Canada in North America as well as an R&TTE declaration and Notified Body Opinion for Europe.

Organisation

This manual consists of 4 chapters, as follows:

- Chapter 1 Lists the standards applicable to this document and device
- Chapter 2 Contains details of the standards applied for the EU region
- Chapter 3 Contains details of the standards applied and statements required for use in the USA
- Chapter 4 Contains details of the standards applied and statements required for use in Canada

1 Introduction

This document contains mandatory statements and declarations for the standards below:

- 1. The JN5168-RD6040 has been tested against the requirements 1.1 European R&TTE Directive 1999/5/EC.
- The JN5168-RD6040 IoT Gateway is compliant with CFR 47 FCC part 15B & CFR 47 FCC part 15C regulations and in accordance to FCC Public notice DA00-1407. This document contains details on the conditions applying to this FCC grant and also contains the FCC Declaration of Conformity.
- The JN5168-RD6040 is compliant with Industry Canada RSS210 (Issue 8, Annex 8) and Industry Canada ICES-003 for Class B devices The JN5168-RD6040 has Industry Canada approval.

2 European R&TTE Directive 1999/5/EC Statement

The JN5168-RD6040 has been tested to and is compliant with the following standards:

- Radio EN 300 328 v1.8.1.
- EMC, EN 301 489-17 v2.1.1
- Basic Safety Assessment (BSA) EN 60950-1:2006

The product is subject to a Notified Body Opinion which may be found in Appendix A1.

The JN5168-RD6040 was tested and approved for use with the supplied 2dBi antenna.

| | Brand | Model Number | Description | Gain (dBi) | Connector type |
|---|--------------------------|-----------------|----------------------------|---------------|----------------|
| 1 | Aveslink Technology, Inc | E-2410-GC | Vertical - swivel | 2 | RP-SMA |
| 2 | Aveslink Technology, Inc | E-2820-GC | Vertical - swivel | 2 | RP-SMA |
| 3 | Embedded Antenna Design | FBKR35068-RS-KR | Vertical - knuckle antenna | 2 | RP-SMA |
| 4 | Sunlight Technology | SLA-100020108 | Vertical - swivel | 2 | RP-SMA |

Table 1: Approved Antennas

Alternative vertical antennas may be used provided that the gain of the replacement antenna does not exceed 2dBi.

3 FCC Compliance

The JN5168-RD6040 IoT Gateway is compliant with CFR 47 FCC part 15B & CFR 47 FCC part 15C regulations and in accordance to FCC Public notice DA00-1407.

3.1.1 FCC Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- · Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

3.1.2 Antennas Approved by FCC for use with JN5168-RD6040

This device has been designed to operate with the antennas listed in Table 1, and having a maximum gain of 2 dBi. Alternative vertical antennas may be used provided that the gain does not exceed 2 dBi. Antennas having a gain greater than 2 dBi are strictly prohibited for use with this FCC ID.

The required antenna impedance is 50 ohms.

Alternative vertical antennas may be used provided that the gain of the replacement antenna does not exceed 2dBi.

3.1.3 FCC ID and Product Labelling

The FCC ID for the JN5168-RD6040 IoT Gateway is

TYOJN5168IT00

This is clearly labelled as shown in Figure 1



Figure 1: JN5168-RD6040 Label

4 Industry Canada Compliance

4.1 Industry Canada Statement

| This device complies with Industry Canada licence- | Le présent appareil est conforme aux CNR d'Industrie |
|--|--|
| exempt RSS standard(s). Operation is subject | Canada applicables aux appareils radio |
| to the following two conditions: (1) this device may | exempts de licence. L'exploitation est autorisée aux |
| not cause interference, and (2) this device must | deux conditions suivantes : (1) l'appareil ne |
| accept any interference, including interference that | doit pas produire de brouillage, et (2) l'utilisateur de |
| may cause undesired operation of the device. | l'appareil doit accepter tout brouillage |
| | radioélectrique subi, même si le brouillage est |
| | susceptible d'en compromettre le fonctionnement. |

To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropic radiated power (e.i.r.p.) is not more than that permitted for successful communication.

This device has been designed to operate with the antennas listed in Table 1, and having a maximum gain of 2 dBi. Alternative vertical antennas may be used provided that the gain does not exceed 2 dBi. The required antenna impedance is 50 ohms.

Alternative vertical antennas may be used provided that the gain of the replacement antenna does not exceed 2dBi.

As long as the above condition is met, further transmitter testing will not be required. However, the OEM integrator is still responsible for testing their end-product for any additional compliance requirements required with this module installed (for example, digital device emissions, PC peripheral requirements, etc).

4.2 Industry Canada End Product Labelling

The Industry Canada ID for the JN5168-RD6040 IoT Gateway is

IC: 7438A-CYO5168IT00

This is clearly labelled as shown in Figure 1

A1: R&TTE Notified Body Opinion

The Notified Body Opinion is embedded into this document. To view the document click the icon below.



A2: FCC Declaration of Conformity FCC COMPLIANCE INFORMATION STATEMENT DECLARATION OF CONFORMITY



 TELEPHONE:
 +44 (0) 114 281 2655

 FACSIMILE:
 +44 (0) 114 281 2951

 E MAIL:
 info@jennic.com

 WEB:
 www.jennic.com

| Manufacturer: | NXP Semiconductors Netherlands B.V | |
|-------------------------------|------------------------------------|--|
| Responsible Party in the USA: | Niel P Smith | |
| | NXP Semiconductors | |
| | 411 E. Plumeria Drive | |
| | San Jose | |
| | CA 95134 | |
| | USA | |
| | Tel 001 408-518 5302 | |
| Product: | JN5168-RD6040-IoT-Gateway | |
| Authorisation Procedure: | Declaration of Conformity | |

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

We, NXP Laboratories (UK) Ltd, have determined that the above named equipment has been shown to comply with the applicable technical standards. Furthermore, we warrant that each unit of equipment marketed is identical to the unit tested and found acceptable with the standards. The records maintained continue to reflect the equipment being produced within the variation that can be expected due to quantity production and testing on a statistical basis.



Sheffield, September 24th, 2013

60 Ferlow

Conrad Farlow, Senior RF Hardware Engineer, NXP Laboratories Ltd

A 2.1: FCC Grant

The FCC grant is embedded into this document. To view the document click the icon below.

GRANT TO BE EMBEDDED WHEN AVAILABLE

A3: Industry Canada Grant

The Industry Canada grant is embedded into this document. To view the document click the icon below.

GRANT TO BE EMBEDDED WHEN AVAILABLE

Revision History

| Version | Date | Description |
|---------|-------------|---------------|
| 1.0 | 23-Oct-2013 | First release |
| | | |

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NXP Laboratories UK Ltd (Formerly Jennic Ltd) Furnival Street Sheffield S1 4QT United Kingdom

Tel: +44 (0)114 281 2655 Fax: +44 (0)114 281 2951

For the contact details of your local NXP office or distributor, refer to:

www.nxp.com/jennic