FCC Part 15D – Compliance Information

EUT AND PRODUCT INFORMATION

Type of Equipment	UPCS (DECT 6.0)
Applicant Name	HM Electronics, Inc.
Address	Whiptail Loop, Carlsbad, CA 92010, USA
Contact	Douglas Paul Sieh
Telephone	(858) 848-3729
Email	dsieh@hme.com
Brand Name	HME

	Base Station	**Handset / Portable**	**WRS**
EUT Type/System	☒	☐	☐
FCC ID	BYMRFM1G9-US		
ISED ID (Canada)			
Model name	RFM1G9-US		
HW Version	T12979		
SW Version	v1		
Maximum Antenna Gain	2.8dBi		
Can the EUT be Initiating Device	☒ YES	☐ YES	☐ YES
Does the EUT transmit signaling channels	☒ YES	☐ YES	☐ YES
Max. # of slots in use simultaneously	12 for TX and 12 for RX		
Frequency Band	1921.536 – 1928.448 MHz		
Number of RF Channels	5		
Frame Period	10 ms		
Max. Burst length	383 usec		
Min. Burst Length	661 usec		
Min. # of System Channels	5 * 12 = 60		
Supported DECT Slot Types	☒ Full Slot	☒ Long Slot	☐ Double Slot
Operating Mode	☐ Simplex	☒ Duplex	

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ANTENNAS

Base Station	Antenna	Type	Internal	External
	1	PIFA	☒	☐
	2	PIFA	☒	☐
	3		☐	☐
	4		☐	☐
	Does RX and TX use the same antenna(s)?		☒ Yes	☐ No
Handset	Antenna	Type	Internal	External
	1		☐	☐
	2		☐	☐
	Does RX and TX use the same antenna(s)?		☐ Yes	☐ No

ANTENNA DIVERSITY

	Antenna	Diversity Supported	
		TX	RX
Base Station	1	☒	☒
	2	☒	☒
	3	☐	☐
	4	☐	☐
Handset	1	☐	☐
	2	☐	☐

VOLTAGE AND TEMPERATURE RANGES

VOLTAGES	Base Station	Handset or Portable	WRS
Nominal Voltage	12VDC		
Cut-Off Voltage (if applicable)	10.8VDC to 13.2VDC		

POWER SOURCE	Type	Manufacturer
Base Station or WRS	• PoE (IEEE 802.3af) • 12VDC connector from external AC/DC power supply 100-240V @ 10A • USB-C	12VDC connector is from Kycon External AC/DC power supply manufacturer is from Adapter Technology Co Ltd.
Handset (Charger)		
Connections on Base	☐ PSTN ☒ USB ☒ Ethernet ☒ Others (please specify) .... SFP optical fiber network connections	

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ANCILLARY EQUIPMENT	
Description	Betlpack
Type	Portable
Manufacturer	Clear-Com, LLC

HOST DEVICE	
Description	Base Station
Type	Portable
Manufacturer	Clear-Com, LLC

ADDITIONAL INFORMATION

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MANUFACTURERS DECLARATIONS		
FCC part 15.323 (c)(5)		
The applicant declares that the system in this application has more than 20 duplex system access channels defined, and that the system is operating in Least Interfered Channel (LIC) mode in accordance with this section.		
Applicant Agrees	☒ Yes	☐ No
FCC part 15.323 (c)(5)		
No device or group of co-operating devices located within 1m of each other shall during any frame period occupy more than 6 MHz of aggregate bandwidth, or alternatively, more than one third of the time and spectrum windows defined by the system.		
Applicant Agrees	☒ Yes	☐ No
FCC part 15.323 (c)(10)		
The applicant hereby declares that the system in this application **does** use the criteria of (c)(10) of this section.		
Applicant Agrees	☒ Yes	☐ No
FCC part 15.323 (c)(11)		
The applicant hereby declares that system in this application **does not** use the criteria of (c)(11) of this section.		
Applicant Agrees	☒ Yes	☐ No
FCC part 15.323 (c)(12)		
The provisions of (c)(10) or (c)(11) of this section **shall not** be used to extend the range of spectrum occupied over space or time for the purpose of denying fair access to spectrum to other devices.		
Applicant Agrees	☒ Yes	☐ No

ADDITIONAL REMARKS:

>

DECLARED BY:

➢ April 6, 2018

Date

>Douglas Paul Sieh

Name (print)

Signature

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FCC Part 15D – Compliance Information

About this document

This document specifies the information that is needed to select the correct testcases and test procedures for testing to FCC Part 15D. The form must be completed by the applicant and submitted to Nemko before testing is started.

Preparation of Equipment for Testing

Note (a): Number of samples for testing

The following samples are needed for FCC 15D testing:

RF Conducted Tests:
One sample with a 50 ohm antenna connector (preferably SMA Female). Only one antenna connector is needed for these tests even if the equipment has more than one antenna.

Monitoring Tests:
One sample with 50 ohm antenna connectors fitted to all antennas (preferably SMA female). Additionally we need a companion device that will work together with the EUT, the companion device must also have antenna connectors on all antennas.

Radiated Tests:
One sample with integral antennas. This sample will be used to measure Antenna Gain, Part 15B and Power-Line Conducted tests.

Note (b): Burst Mode

All RF tests are performed with the EUT in force transmit, aka burst mode. Software and necessary programming tools must be submitted to Nemko together with the test samples before start of testing.

Note (c): Monitoring Tests

Monitoring tests are performed in normal operating mode by establishing a connection from the handset (or the initiating device) to the base station (or the responding device). Most tests are performed by establishing connections from the initiating device to the responding device and observing which channel and/or timeslot is used.

For monitoring tests we need a EUT and a Companion device that both have antenna connectors on all antennas (preferably SMA female, again). Additionally, we need access to the CLK100 signal on the Base Station, this is necessary because some of the tests require that the interferers are synced to the DECT frame.

Note (d): Connection to an external power supply

Means of connecting the equipment to an external power supply shall be supplied by the applicant together with the equipment to be tested.

Battery operated equipment shall be supplied with the necessary batteries and chargers. All tests on battery operated equipment will be performed with batteries.

Note (e): Test-Mode (Loopback Mode)

Loopback Mode is usually not used for FCC testing.

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