

FCC Part 15D – Compliance Information

EUT AND PRODUCT INFORMATION

Type of Equipment	UPCS (DECT 6.0)
Applicant Name	Sennheiser Electronic Corp.
Address	1 Enterprise Drive, Old Lyme, 06371, Connecticut, United States
Contact	Michael Lieske
Telephone	860-434-9190 Extension: 154
Email	Michael.Lieske@sennheiser.com
Brand Name	SENNHEISER

	Base Station	Handset / Portable	WRS
EUT Type/System	☒	☒	☐
FCC ID	DMOSCDB3	DMOSCDH1	
ISED ID (Canada)	2099A-SCDB3	2099A-SCDH1	
Model name	SCDB3 SCDB4	SCDH1	
HW Version	Gamma 1 (IFB: 9C, WCB: 7B)	Gamma 1 (3IN1: 10A)	
SW Version	0.12.3	0.12.3	
Maximum Antenna Gain	1 dBi	1 dBi	
Can the EUT be Initiating Device	☐ YES	☒ YES	☐ YES
Does the EUT transmit signaling channels	☒ YES	☐ YES	☐ YES
Max. # of slots in use simultaneously	5	2	
Frequency Band	1921.536 – 1928.448 MHz		
Number of RF Channels	5		
Frame Period	10 ms		
Max. Burst length	118 µs		
Min. Burst Length	681 µs		
Min. # of System Channels	30		
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	monopole antenna	☒	☐
	2	Inverted F	☒	☐
	3		☐	☐
	4		☐	☐
	Does RX and TX use the same antenna(s)?		☒ Yes	☐ No
Handset	Antenna	Type	Internal	External
	1	monopole antenna	☒	☐
	2	Inverted F	☒	☐
	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	5Vdc	3.7Vdc	-
Cut-Off Voltage (if applicable)		3.5V	-
POWER SOURCE	Type	Manufacturer	
Base Station or WRS	EPS, 5V/2A	SIL	
Handset (Charger)	Base stations, CH 30	SENNHEISER	
Connections on Base	☐ PSTN ☒ USB ☐ Ethernet ☒ Others (please specify) Host phone port, handset port, busy light port.		

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ANCILLARY EQUIPMENT	
Description	
Type	
Manufacturer	

HOST DEVICE	
Description	
Type	
Manufacturer	

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: 2017-10-16 Date Michael Lieske Name (print)  Signature		

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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): Monitoring Tests

Monitoring tests are performed 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 (c): 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 (d): Burst Mode

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

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

Some FCC test may also be performed in Loopback Mode with a CMD60 or similar DECT tester. If loopback mode is implemented in the EUT, the method for setting the equipment in Loopback should be submitted to Nemko together with the test samples before start of testing.