

EN 50371 REPORT

REPORT NO. : SE981105L13

MODEL NO. : EP801

ACCORDING: EN 50371: 2002

APPLICANT : Senao Networks, Inc.

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Taiwan, R.O.C.

ISSUED BY : Bureau Veritas Consumer Products Services
(H.K.) Ltd., Taoyuan Branch

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1. CERTIFICATION

PRODUCT: Digital Long Range Cordless System
MODEL NO.: EP801
BRAND: EnGenius
APPLICANT: Senao Networks, Inc.
TESTED: Dec. 17 ~ Dec. 18, 2009
TEST SAMPLE: ENGINEERING SAMPLE
STANDARDS: EN 50371: 2002

The above equipment (model: EP801) has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

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Andrea Hsia / Specialist

TECHNICAL ACCEPTANCE : James Fan , **DATE :** Jan. 20, 2010
Responsible for RF James Fan / Senior Engineer

APPROVED BY : Gary Chang , **DATE :** Jan. 20, 2010
Gary Chang / Assistant Manager

2. GENERAL INFORMATION

2.1. GENERAL DESCRIPTION OF EUT

PRODUCT	Digital Long Range Cordless System		
MODEL NO.	EP801		
NOMINAL VOLTAGE	12Vdc (from AC Adapter) 3.7Vdc (from battery) 5.5Vdc (from charger)		
VOLTAGE OPERATING RANGE	$V_{nom}= 230$	$V_{min}= 207$	$V_{max}= 253$
	$V_{nom}= 3.7$	$V_{min}= 3.1$	
TEMPERATURE OPERATING RANGE	0~55°C (Base Station) -10~60°C (Portable Handset)		
MODULATION TYPE	GMSK		
OPERATING FREQUENCY	863.08 ~ 864.93MHz		
NUMBER OF CHANNEL	38		
EIRP POWER	9.52dBm (Measured Max. Average)		
ANTENNA TYPE	Dipole antenna with 2dBi gain (Base Station) Dipole antenna with 2.5dBi gain (long Ant. Portable Handset) Dipole antenna with 1.5dBi gain (short Ant. Portable Handset)		
DATA CABLE	0.6m non-shielded cable without core		
I/O PORT	Refer to user's manual		
ACCESSORY DEVICE	Adapter, charger, Battery		

NOTE:

- The EUT uses following adapters, battery & Charger.

ADAPTER (for Base Station used)	
BRAND	DVE
MODEL	DSA-12G-12 FEU 120120
INPUT POWER	100-240Vac, 50/60Hz, 0.3A
OUTPUT POWER	12Vdc, 1A
POEWR LINE	1.8m non-shielded cable without core

BATTERY (for Base Station used)	
BRAND	EnGenius
INPUT POWER	1100mAh
OUTPUT POWER	3.7Vdc

ADAPTER (for Charger used)	
BRAND	FAIRWAY
MODEL	WRG10F-055B
INPUT POWER	100-240Vac, 47-63Hz, 0.3A
OUTPUT POWER	5.5Vdc, 1.5A
POWER LINE	1.8m non-shielded cable with one core

2. A set of the EUT include Base station & Portable handset
3. The above EUT information was declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications or User's Manual.

3. RF Exposure Measurement

3.1 Introduction

This generic standard applies to low power electronic and electrical apparatus for which no dedicated product – or product family standard regarding human exposure to electromagnetic fields applies.

The frequency range covered is 10 MHz to 300 GHz.

The object of this standard is to demonstrate the compliance of such apparatus with the basic restrictions on exposure of the general public to electric, magnetic and electromagnetic fields and contact current.

3.2 Compliance criteria

All electromagnetic fields

If the average power emitted by the apparatus operating in the frequency range 10 MHz to 300 GHz is less than or equal to 20 mW and the transmitting peak power is less than 20 W then the apparatus is deemed to comply with the basic restrictions without testing. Averaging time is 6 minutes in the frequency range 10 MHz to 10 GHz. The average time is equal to $68/f^{1.05}$ minutes (where f is in GHz) in the frequency range 10 GHz to 300 GHz.

If the total supply power or the input power to the circuitry producing the greatest emissions in the device is less than or equal to 20 mW then it is assumed that the emitted power is less than 20 mW.

Pulse modulated electromagnetic fields with pulse duration less than 30 micro seconds

For pulse of duration less than 30 microseconds at frequencies between 300 MHz and 10 GHz, there is also a basic restriction on SA. This is 2mJ kg^{-1} in any 10g of tissue in the head. For most pulses, the SAR restriction will be more stringent, but for pulses with a repetition frequency of less than 100 Hz, the SA restriction will predominate. For devices producing pulses with repetition rates below 100 Hz, the average power should be less than $20 \times \text{prf mW}$ (prf in Hz).

3.3 EUT Operating condition

The software provided by manufacturer enabled the EUT to transmit and receive data at lowest, middle and highest channel individually.

3.4 Test Results

MAXIMUM EIRP:

AV Power (EIRP)(mW)	AV Power Limit (EIRP) (mW)	Pass / Fail
8.95	20	PASS

NOTE: According to EUT's specification, the compliance criteria item 2.1 shall be followed up.