



RF EXPOSURE REPORT

REPORT NO.: SA110729E04

MODEL NO.: HES-209M1H, BM2022

FCC ID: ZMYHES209M1H

RECEIVED: July 29, 2011

TESTED: Sep. 28, 2011

ISSUED: Oct. 11, 2011

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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
SA110729E04	Original release	Oct. 11, 2011



1. CERTIFICATION

PRODUCT: WiMAX Indoor VoIP IAD
BRAND: Mitrastar, Huawei
MODEL NO.: HES-209M1H, BM2022
PREPARED BY: MitraStar Technology Corporation
TEST SAMPLE: MASS-PRODUCTION
TESTED: Sep. 28, 2011
STANDARD: FCC Part 2 (Section 2.1091)
FCC OET Bulletin 65, Supplement C (01-01)
IEEE C95.1

The above equipment (Model: HES-209M1H) 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.

PREPARED BY :  , **DATE:** Oct. 11, 2011
(Claire Kuan, Specialist)

APPROVED BY :  , **DATE:** Oct. 11, 2011
(May Chen, Deputy Manager)

2. RF Exposure Limit

LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

FREQUENCY RANGE (MHz)	ELECTRIC FIELD STRENGTH (V/m)	MAGNETIC FIELD STRENGTH (A/m)	POWER DENSITY (mW/cm ²)	AVERAGE TIME (minutes)
LIMITS FOR GENERAL POPULATION / UNCONTROLLED EXPOSURE				
300-1500	F/1500	30
1500-100,000	1.0	30

F = Frequency in MHz

3. MPE calculation Formula

$$P_d = (P_{out} * G) / (4 * \pi * r^2)$$

where

P_d = power density in mW/cm²

P_{out} = output power to antenna in mW

G = gain of antenna in linear scale

π = 3.1416

r = distance between observation point and center of the radiator in cm

4. Classification

The antenna of this product, under normal use condition, is at least 20cm away from the body of the user. So, this device is classified as a user stations.

5. Calculation result of maximum conducted power

For channel bandwidth: 5MHz

FREQUENCY BAND (MHz)	MAX POWER (mW)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/ cm ²)	LIMIT (mW/cm ²)
2505~2680	442.6	5.9	20	0.343	1.00

For channel bandwidth: 10MHz

FREQUENCY BAND (MHz)	MAX POWER (mW)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/ cm ²)	LIMIT (mW/cm ²)
2505~2685	445.0	5.9	20	0.344	1.00