



RF EXPOSURE REPORT

REPORT NO.: SA990329C12

MODEL NO.: 7902

FCC ID: PJO7902

ACCORDING: FCC Guidelines for Human Exposure
IEEE C95.1

APPLICANT: Arima Communications Corp.

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(R.O.C.)

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

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TEST LOCATION: No. 19, Hwa Ya 2nd Rd, Wen Hwa Tsuen, Kwei
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R.O.C.

1. 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

2. 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

3. 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 **Mobile Device**.

4. CALCULATION RESULT OF MAXIMUM CONDUCTED POWER

850MHz Frequency Band:

MODE	MAX CONDUCTED POWER (dBm)	MAX CONDUCTED POWER (mW)	DUTY CYCLE (%)	EQUIVALENT CONDUCTED OUTPUT POWER (mW)
GPRS	32.3	1698.24	25	424.56

P	Maximum power input to the antenna:	424.56 mW
R	Distance:	20 cm
S	MPE limit for uncontrolled exposure:	0.55 mW/cm
G ₁	Antenna gain (numerical) to comply with MPE limit:	6.50
G ₁	Antenna gain (dBi) to comply with MPE limit:	8.13 dBi
	ERP limit to comply with categorically exclusion of 2.1091(c)	1.5 W
G ₂	Antenna gain (numerical) to comply with ERP limit:	5.79
G ₂	Antenna gain (dBi) to comply with ERP limit:	7.63 dBi
	ERP power limit according to 22.913(a):	7 W
G ₃	Antenna gain (numerical) to comply with ERP limit:	6.76
G ₃	Antenna gain (dBi) to comply with ERP limit:	8.30 dBi
G _{850 MHz band}	Min (G ₁ , G ₂ , G ₃):	7.63 dBi

1900MHz Frequency Band:

MODE	MAX CONDUCTED POWER (dBm)	MAX CONDUCTED POWER (mW)	DUTY CYCLE (%)	EQUIVALENT CONDUCTED OUTPUT POWER (mW)
GPRS	29.6	912.01	25	228.00

P	Maximum power input to the antenna:	228.00 mW
R	Distance:	20 cm
S	MPE limit for uncontrolled exposure:	1.00 mW/cm
G ₄	Antenna gain (numerical) to comply with MPE limit:	22.03
G ₄	Antenna gain (dBi) to comply with MPE limit:	13.43 dBi
	ERP limit to comply with categorically exclusion of 2.1091(c)	4.92 W
G ₅	Antenna gain (numerical) to comply with ERP limit:	21.58
G ₅	Antenna gain (dBi) to comply with ERP limit:	13.34 dBi
	ERP power limit according to 22.913(a):	2 W
G ₆	Antenna gain (numerical) to comply with ERP limit:	2.19
G ₆	Antenna gain (dBi) to comply with ERP limit:	3.41 dBi
G _{1900 MHz band}	Min (G ₄ , G ₅ , G ₆):	3.41 dBi