

# **FCC RF EXPOSURE REPORT**

**FCC ID: 2ALJ8-CTL001A**

**Project No. : 1702C003**  
**Equipment : WCDMA/GPRS Wireless Data Terminal**  
**Model : CTL-001A, CTL-001**  
**Applicant : Cathay Tri-Tech.,Inc**  
**Address : 3-24-5,Shinyokohama Kohoku-ku,Yokohama**  
**222-0033,Japan**

**According: : FCC Guidelines for Human Exposure IEEE**  
**C95.1 & FCC Part 2.1091**

**B T L I N C .**

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## MPE CALCULATION METHOD:

Calculation Method of RF Safety Distance:

$$S = \frac{PG}{4\pi^2} = \frac{EIRP}{4\pi^2}$$

where:

S = power density

P = power input to the antenna

G = power gain of the antenna in the direction of interest relative to an isotropic radiator

R = distance to the center of radiation of the antenna

Table for Filed Antenna

Ant.	Brand	Model Name	Antenna Type	Connector	Gain(dBi)	Note
1	N/A	N/A	External Antenna	N/A	-0.97dBi	GSM 850 & WCDMA Band 5
2	N/A	N/A	Printed Antenna	N/A	2.01dBi	DCS 1900 & WCDMA Band 2

## TEST RESULTS

EUT :	WCDMA/GPRS Wireless Data Terminal	Model Name :	CTL-001A
Temperature :	25 °C	Relative Humidity:	55 %
Test Voltage :	AC 120V/60Hz		

### GSM850

Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm <sup>2</sup> )	Limit of Power Density (S) (mW/cm <sup>2</sup> )	Test Result
-0.97	0.7998	30.93	1238.7966	0.19722	2.74	Complies

### DCS1900

Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm <sup>2</sup> )	Limit of Power Density (S) (mW/cm <sup>2</sup> )	Test Result
-0.97	0.7998	32.04	1599.5580	0.25465	5	Complies

Note: the calculated distance is 20 cm.