



CAEN RFID srl

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Object: RF exposure info for R1230CB (Quark - Low Power OEM UHF Compact RFID Reader)
FCC ID: UVECAENRFID010

Prediction of Maximum Permissible Exposure (MPE) limit at a given distance has been performed according to Prediction Methods described in Section 2 of OET Bulletin 65, Edition 97-01.

$$\frac{P \cdot G}{4 \cdot \pi \cdot R^2}$$

Where: S = power density (in appropriate units, e.g. mW/cm²)
P = power input to the antenna (in appropriate units, e.g. mW)
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 (appropriate units, e.g. cm)

MPE limit has been calculated according to General Population/Uncontrolled rules.

- WANTENNAX012

Frequency (Mhz)	902
MPE limit (mW/cm ²)	0.60
Maximum conducted power (mW)	200
Maximum conducted power (dBm)	23.0
Antenna gain (dBi)	1.3
Maximum EIRP (dBm)	24.3
Maximum EIRP (mW)	269.8
Prediction distance (cm)	20
Maximum power density at prediction distance (mW/cm ²)	0.054
Maximum antenna allowable gain (dBi)	11.79

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- WANT021XMMCX

Frequency (Mhz)	902
MPE limit (mW/cm ²)	0.60
Maximum conducted power (mW)	200
Maximum conducted power (dBm)	23.0
Antenna gain (dBi)	0.7
Maximum EIRP (dBm)	23.7
Maximum EIRP (mW)	235.0
Prediction distance (cm)	20
Maximum power density at prediction distance (mW/cm ²)	0.047
Maximum antenna allowable gain (dBi)	11.79