



Viareggio May 24th, 2019

Object: RF exposure info for R4320C - Hadron - High Performance 4-port Embedded UHF RFID Reader  
FCC ID: UVECAENRFID027

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/cm<sup>2</sup>)  
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.

1) Antenna CAEN RFID P.N. WANT021XMMCX

Frequency (MHz)	902
MPE limit (mW/cm <sup>2</sup> )	0.60
Maximum conducted power (mW)	1000
Maximum conducted power (dBm)	30.0
Antenna gain (dBi)	0.7
Maximum EIRP (dBm)	30.7
Maximum EIRP (mW)	1175
Prediction distance (cm)	25
Maximum power density at prediction distance (mW/cm <sup>2</sup> )	0.150



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2) Antenna CAEN RFID P.N. WANTENNAX020

Frequency (MHz)	902
MPE limit (mW/cm <sup>2</sup> )	0.60
Maximum conducted power (mW)	1000
Maximum conducted power (dBm)	30.0
Antenna gain (dBi)	5.5
Maximum EIRP (dBm)	35.5
Maximum EIRP (mW)	3548
Prediction distance (cm)	25
Maximum power density at prediction distance (mW/cm <sup>2</sup> )	0.452