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# **Maximum Permissible Exposure Evaluation**

## FCC ID: 2AEK8-GOFUTUREIPC02

According to FCC 1.1310: The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) Radiation as specified in §1.1307(b)

#### **EUT Specification**

Product Name:	IP Camera					
Trade Mark:	/					
Model/Type reference:	IPC02					
Listed Model(s):	IPC01, PC03, IPC04, IPC05, IPC06, IPC07, IPC08, IPC09, IPC10, IPC11, IPC12, IPC13, IPC14, IPC15, IPC16, IPC17, IPC18, IPC19, IPC20, IPC21, IPC22, IPC23, IPC24, IPC25, IPC26, IPC27, IPC28, IPC29, IPC30, IPC31, IPC32, IPC33, IPC34, IPC35, IPC36, IPC37, IPC38, IPC39, IPC40, IPC41, IPC42, IPC43, IPC44, IPC45, IPC46, IPC47, IPC48, IPC49, IPC50, IPC51, IPC52, IPC53, IPC54, IPC55, IPC56, IPC57, IPC58, IPC59, IPC60, IPC61, IPC62, IPC63, IPC64, IPC65, IPC66, IPC67, IPC68, IPC69, IPC70, IPC71, IPC72, IPC73, IPC74, IPC75, IPC76, IPC77, IPC78, IPC79, IPC80, IPC81, IPC82, IPC83, IPC84, IPC85, IPC96, IPC87, IPC88, IPC89, IPC90, IPC91, IPC92, IPC93, IPC94, IPC95, IPC96, IPC97, IPC98, IPC99, IPC100, SC01, SC02, SC03, SC04, SC05, SC06, SC07, SC08, SC09, SC10, SC11, SC12, SC13, SC14, SC15, SC16, SC17, SC18, SC19, SC20, SC21, SC22, SC23, SC24, SC25, SC26, SC27, SC28, SC29, SC30, SC31, SC32, SC33, SC34, SC35, SC36, SC37, SC38, SC39, SC40, SC41, SC42, SC43, SC44, SC45, SC46, SC47, SC48, SC49, SC50, SC51, SC52, SC53, SC54, SC55, SC56, SC57, SC58, SC59, SC60, SC51, SC52, SC33, SC34, SC35, SC36, SC37, SC38, SC39, SC40, SC41, SC42, SC43, SC44, SC45, SC46, SC47, SC48, SC49, SC50, SC51, SC52, SC53, SC54, SC55, SC56, SC57, SC58, SC59, SC60, SC51, SC52, SC33, SC34, SC35, SC36, SC37, SC38, SC39, SC40, SC41, SC42, SC43, SC44, SC45, SC46, SC47, SC48, SC49, SC50, SC51, SC52, SC53, SC54, SC55, SC56, SC57, SC58, SC59, SC60, SC61, SC62, SC63, SC64, SC65, SC66, SC67, SC68, SC69, SC70, SC71, SC72, SC73, SC74, SC75, SC76, SC77, SC78, SC79, SC80, SC81, SC82, SC83, SC84, SC85, SC86, SC87, SC88, SC89, SC90, SC91, SC92, SC93, SC94, SC95, SC96, SC97, SC98, SC99, SC100					
Frequency band (Operating)	WLAN: 2.412GHz ~ 2.462GHz					
Device category	<ul> <li>Portable (&lt;5mm separation)</li> <li>Mobile (&gt;20cm separation)</li> <li>Fixed (&gt;20cm separation)</li> <li>Others</li> </ul>					
Exposure classification	□Occupational/Controlled exposure (S=5mW/cm2) □General Population/Uncontrolled exposure (S=1mW/cm2)					
Antenna diversity	Single antenna Multiple antenna Tx diversity Rx diversity Tx/Rx diversity					
Antenna gain (Max)	3.0dBi					
Evaluation applied	MPE Evaluation					



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## Limits for Maximum Permissible Exposure (MPE)

Frequency Range(MHz)	Electric Field Strength(V/m)	Magnetic Field Strength(A/m)	Power Density(mW/cm <sup>2</sup> )	Average Time					
(A) Limits for Occupational/Control Exposures									
300-1500			F/300	6					
1500-100000			5	6					
(B) Limits for General Population/Uncontrol Exposures									
300-1500			F/1500	6					
1500-100000			1	30					

Friis transmission formula: Pd=(Pout\*G)\(4\*pi\*R<sup>2</sup>)

Where

Pd= Power density in mW/cm<sup>2</sup>

Pout= output power to antenna in mW

G= gain of antenna in linear scale

Pi= 3.1416

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

Pd the limit of MPE 1mW/cm<sup>2</sup>. If we know the maximum gain of the antenna and total power input to the antenna, through the calculation, we will know the distance where the MPE limit is reached.

## **Measurement Result**

Test Mode	Frequency (MHz)	Max. Measured Power (dBm)	Max. Tune up Power (dBm)	Antenna Gain (dBi)	Power density at 20cm (mW/cm <sup>2</sup> )	Power density Limits (mW/cm <sup>2</sup> )
802.11 B	2412-2462	14.11	14.50	3.0	0.0112	1

Note:

1. Calculate by Worst-case mode.

2. Max. Tune Up Power by Manufacturer's Declaration, and Max. Tune Up Power is used to calculate.

3. For a more detailed features description, please refer to the RF Test Report.