MPE Calculations (Mobile)

The device is not a portable device (i.e. intended to be worn on the body or be hand-held), so it is classified as being either a mobile device or a fixed mounted device. The user/s manual specifies a minimum separation distance of at least 20cm, consistent with this classification.

FCC part 1.1310, Table 1 limits the power density for uncontrolled exposure. The power density, Pd (mW/cm2) calculated from the maximum EIRP, Pt (mW) and the distance, d (m), between the transmitting antenna and the closest person, can be calculated using:

Formula is:

 $Pd = Pt / (4*pi*d^2)$

Frequency (MHz)	MPE Limit (mW/cm ²)	Eirp (mW)	Pd at 20cm (mW/cm ²)	Distance where Pd = Limit (cm)
2400 - 4990	1	1900.93	0.38	12.3

Band	Mode	Output	out Power Antenna gain		E	IRP	Channala Availabla	Channols Llood	Total EIRP	
		Peak	Average	(Max)	dBm	W	Charmels Available	Channels Oseu	W	dBm
2400 - 2483.5	CCK	-	20.0	7.5	27.5	0.562	11	1	0.562	27.50
2400 - 2483.5	CCK	-	20.0	7.5	27.5	0.562	11	1	0.562	27.50
4940 - 4990	OFDM	-	21.4	7.5	28.9	0.776	10	1	0.776	28.90
							Totals:	3	1.901	32.79

MPE exposure is based on two 2.4GHz pre-approved modules with one 4.9GHz transmitter. Device can be programmed to transmitt simultaneously.

Formula is:

 $Pd = Pt / (4*pi*d^2)$

Frequency (MHz)	MPE Limit (mW/cm ²)	Eirp (mW)	Pd at 20cm (mW/cm ²)	Distance where Pd = Limit (cm)
2400 - 4990	1	1687.02	0.34	11.6

Band	Mada	Output Power		Antenna gain EIRP		Channala Availabla	Channela Llood	Total EIRP		
	Mode	Peak	Average	(Max)	dBm	W	Channels Available	Channels Used	W	dBm
2400 - 2483.5	CCK	-	20.0	7.5	27.5	0.562	11	1	0.562	27.50
2400 - 2483.5	CCK	-	20.0	7.5	27.5	0.562	11	1	0.562	27.50
2400 - 2483.5	CCK	-	20.0	7.5	27.5	0.562	11	1	0.562	27.50
							Totals:	3	1.687	32.27

MPE exposure is based on three 2.4GHz transmitter. Device can be programmed to transmitt simultaneously.

Formula is:

Pd = Pt / (4*pi*d²)

Frequency (MHz)	MPE Limit (mW/cm ²)	Eirp (mW)	Pd at 20cm (mW/cm ²)	Distance where Pd = Limit (cm)
2400 - 4990	1	2114.84	0.42	13.0

Rand	Modo	Output Power		Antenna gain EIRP		Channels Available	Channels Lised	Total EIRP		
Danu	would	Peak	Average	(Max)	dBm	W	Charmels Available	Channels Used	W	dBm
2400 - 2483.5	CCK	-	20.0	7.5	27.5	0.562	11	1	0.562	27.50
4940 - 4990	OFDM	-	21.4	7.5	28.9	0.776	10	1	0.776	28.90
4940 - 4990	OFDM	-	21.4	7.5	28.9	0.776	10	1	0.776	28.90
							Totals:	3	2.115	33.25

MPE exposure is based on two 4.9GHz transmitter and one 2.4GHz radio. Device can be programmed to transmitt simultaneously.

MPE Calculations (Fixed Location)

The device is not a portable device (i.e. intended to be worn on the body or be hand-held), so it is classified as a fixed mounted device. The user's manual specifies a minimum separation distance of at least 35cm, consistent with this classification.

FCC part 1.1310, Table 1 limits the power density for uncontrolled exposure. The power density, Pd (mW/cm2) calculated from the maximum EIRP, Pt (mW) and the distance, d (m), between the transmitting antenna and the closest person, can be calculated using:

Formula is:

 $Pd = Pt / (4*pi*d^2)$

Frequency (MHz) MPE Lir		Eirp (mW)	Pd at 20cm	Distance where Pd
(mW/cm			(mW/cm ²)	= Limit (cm)
2400 - 4990	1	22401.78	4.46	42.2

Band	Mada	Output Power		Antenna gain EIRP		Channols Available	Channela Llaad	Total EIRP		
	Mode	Peak	Average	(Max)	dBm	W	Charmels Available	Channels Oseu	W	dBm
2400 - 2483.5	CCK	-	13.0	21.0	34.0	2.51	11	1	2.512	34.00
2400 - 2483.5	CCK	-	13.0	21.0	34.0	2.51	11	1	2.512	34.00
4940 - 4990	OFDM	-	21.4	21.0	42.4	17.38	10	1	17.378	42.40
Totals:						3	22.402	43.50		

MPE exposure is based on two 2.4GHz pre-approved modules with one 4.9GHz transmitter. Device can be programmed to transmitt simultaneously.

Formula is: Pd = Pt / (4*pi*d²)

	MPF L imit		Pd at 20cm	Distance where Pd	
Frequency (MHz)	(mW/cm ²)	Eirp (mW)	(mW/cm ²)	= Limit (cm)	
2400 - 4990	1	7535.66	1.50	24.5	

Band	Mode	Mode Output P		t Power Antenna gain		RP	Channels Available	Channols Llood	Total EIRP	
		Peak	Average	(Max)	dBm	W	Shamela Available	Channels Used	W	dBm
2400 - 2483.5	CCK	-	13.0	21.0	34.0	2.512	11	1	2.512	34.00
2400 - 2483.5	CCK	-	13.0	21.0	34.0	2.512	11	1	2.512	34.00
2400 - 2483.5	CCK	-	13.0	21.0	34.0	2.512	11	1	2.512	34.00
							Totals:	3	7.536	38.77

MPE exposure is based on three 2.4GHz transmitter. Device can be programmed to transmitt simultaneously.

Formula is:

$Pd = Pt / (4*pi*d^2)$

Frequency (MHz)	MPE Limit (mW/cm ²)	Eirp (mW)	Pd at 20cm (mW/cm ²)	Distance where Pd = Limit (cm)
2400 - 4990	1	37267.90	7.41	54.5

Γ	Band Mod	Mada	Output Power		Antenna gain EIRP		RP	Channela Available	Channela Lload	Total EIRP	
		woue	Peak	Average	(Max)	dBm	W	Onanneis Available	Channels Oseu	W	dBm
ſ	2400 - 2483.5	CCK	-	13.0	21.0	34.0	2.512	11	1	2.512	34.00
	4940 - 4990	OFDM	-	21.4	21.0	42.4	17.38	10	1	17.378	42.40
Γ	4940 - 4990	OFDM	-	21.4	21.0	42.4	17.38	10	1	17.378	42.40
Г								Totals:	3	37.268	45.71

MPE exposure is based on two 4.9GHz transmitter and one 2.4GHz radio. Device can be programmed to transmitt simultaneously.