產品名稱: **Hardware for Enhanced Remote-, Mobility- & Emergency Services**
產品型號: **HERMES 3.0**

1.1 適用標準

依據國家通訊傳播委員會低功率射頻器材技術規範6.20.2節之規定，若受測物於正常操作模式下，其發射機距離人體20公分以上者，可測試最大暴露允許值 (Maximum Permissible Exposure (MPE)以證明其符合電波暴露量之要求。

限制如下:

(1)職業性/可控制之暴露

頻率範圍 (MHz)	電場強度 (V/m)	磁場強度 (A/m)	功率密度 (mW/cm^2)	平均時間 (分)
0.3～3.0	614	1.63	*100	6
3～30	1842/f	4.89/f	$*900/f^2$	6
30～300	61.4	0.163	1.0	6
300～1,500	-----	-----	f/300	6
1,500～100,000	-----	-----	5.0	6

註1: 標記*表平面波等效功率密度。
註2: f表測試試頻率，單位：MHz。

(2) 一般人/不可控制之暴露

頻率範圍 (MHz)	電場強度 (V/m)	磁場強度 (A/m)	功率密度 (mW/cm^2)	平均時間 (分)
0.3～1.34	614	1.63	*100	30
1.34～30	824/f	2.19/f	$*180/f^2$	30
30～300	27.5	0.073	0.2	30
300～1,500	-----	-----	f/1500	30
1,500～100,000	-----	-----	1.0	30

註1：標記*表平面波等效功率密度。
註2：f表測試頻率，單位：MHz。

Prediction of MPE limit at a given distance
Equation from page 18 of OET Bulletin 65, Edition 97-01
$S=PG/4\pi R^2$
Where: S = Power density
P = Power input to 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

1.2 Maximum Permissible Exposure (MPE) Evaluation

Frequency Band (MHz)	Conducted power (dBm)	Antenna gain (dBi)	Tune-Up Tolerance (dB)	EIRP (dBm)	MPE (mW/cm^2)	LIMIT (mW/cm^2)
2412 - 2462	21.02	5.63	2	28.650	0.14579081	1
5180 - 5240	10.43	3.76	2	16.190	0.00827428	1
5745 - 5825	10.69	4.01	2	15.700	0.00739146	1

1.3 Maximum Permissible Exposure (MPE) Evaluation

Band 1: 2100MHz mode

Maximum Average output power at antenna input	25.21	(dBm)
Power Tolerance	2	dB
Maximum peak output power at antenna input terminal:	526.0172664	(mW)
Duty cycle:	99	(%)
Maximum Pav :	520.7570937	(mW)
Antenna gain (typical):	-4	(dBi)
Maximum antenna gain:	0.398107171	(numeric)
Prediction distance:	20	(cm)
MPE limit for uncontrolled exposure at prediction	0.45	(mW/cm^2)
Power density at predication frequency at 20 (cm)	0.0412654	(mW/cm^2)

The Max. predicted power density level at 20 cm is 0.0412654mW/cm2. This is below the uncontrolled exposure limit of .1.0 mW/cm2.

Band 3: 1800MHz mode

Maximum Average output power at antenna input	25.31	(dBm)
Power Tolerance	2	dB
Maximum peak output power at antenna input terminal:	538.2697825	(mW)
Duty cycle:	99	(%)
Maximum Pav :	532.8870847	(mW)
Antenna gain (typical):	-4	(dBi)
Maximum antenna gain:	0.398107171	(numeric)
Prediction distance:	20	(cm)
MPE limit for uncontrolled exposure at prediction	0.45	(mW/cm^2)
Power density at predication frequency at 20 (cm)	0.0422265	(mW/cm^2)

The Max. predicted power density level at 20 cm is 0.0422265mW/cm2. This is below the uncontrolled exposure limit of .0.9 mW/cm2.

Band 7: 2600MHz mode

Maximum Average output power at antenna input	25.38	(dBm)
Power Tolerance	2	dB
Maximum peak output power at antenna input terminal:	547.0159629	(mW)
Duty cycle:	99	(%)
Maximum Pav :	541.5458033	(mW)
Antenna gain (typical):	-5.5	(dBi)
Maximum antenna gain:	0.281838293	(numeric)
Prediction distance:	20	(cm)
MPE limit for uncontrolled exposure at prediction	0.45	(mW/cm^2)
Power density at predication frequency at 20 (cm)	0.0303798	(mW/cm^2)

The Max. predicted power density level at 20 cm is 0.0303798mW/cm2. This is below the uncontrolled exposure limit of .1.0 mW/cm2.

Band 8: 900MHz mode

Maximum Average output power at antenna input	25.35	(dBm)
Power Tolerance	2	dB
Maximum peak output power at antenna input terminal:	543.2503315	(mW)
Duty cycle:	99	(%)
Maximum Pav :	537.8178282	(mW)
Antenna gain (typical):	-4	(dBi)
Maximum antenna gain:	0.398107171	(numeric)
Prediction distance:	20	(cm)
MPE limit for uncontrolled exposure at prediction	0.45	(mW/cm^2)
Power density at predication frequency at 20 (cm)	0.0426173	(mW/cm^2)

The Max. predicted power density level at 20 cm is 0.0426173mW/cm2. This is below the uncontrolled exposure limit of .0.45 mW/cm2.

Band 28: 700MHz mode

Maximum Average output power at antenna input	25.37	(dBm)
Power Tolerance	2	dB
Maximum peak output power at antenna input terminal:	545.7578611	(mW)
Duty cycle:	99	(%)
Maximum Pav :	540.3002825	(mW)
Antenna gain (typical):	-4	(dBi)
Maximum antenna gain:	0.398107171	(numeric)
Prediction distance:	20	(cm)
MPE limit for uncontrolled exposure at prediction	0.45	(mW/cm^2)
Power density at predication frequency at 20 (cm)	0.0428140	(mW/cm^2)

The Max. predicted power density level at 20 cm is 0.0428140mW/cm2. This is below the uncontrolled exposure limit of .0.45 mW/cm2.