



Specification for MCPA of TETRA, SMR800, iDEN, Public Safty800, PMR, Digital TRS, NASPAC Multi Carrier Amplifier & Sub System

1. Electrical Specification.

Parameter	Specification	Remark
Frequency Range	806MHz~824MHz	18MHz BW
Output Power	2W	ALC 2.5W : Min 10dB
Gain	52dB±1dB	
Gain Flatness	±0.5dB	
Gain Variation Over Temp.	±1dB max	-20°C~+60°C
IMD	< -60dBc	CW 10 tone, Ch Sp. : 25kHz
Harmonic	-45dBc max	
Input VSWR	1.5:1 max.	
Output VSWR	1.5:1 max.	Isolator Applied
Normal Operating Voltage	+27V	
DC Current Consumption	1.3A max.	@2W
Output protection	Isolator	
Shut-down Temp Level	90±5°C	70±5°C Auto Enable

2. Environmental Specification

Parameter	Specification	Remark
Operating Temperature	-20°C~+60°C	
Storage Temperature	-40°C~+85°C	
Relative Humidity	0%~90%	Non-condensing

3. Mechanical Specification.

Physical Dimension : 120mm X 150mm X 28mm



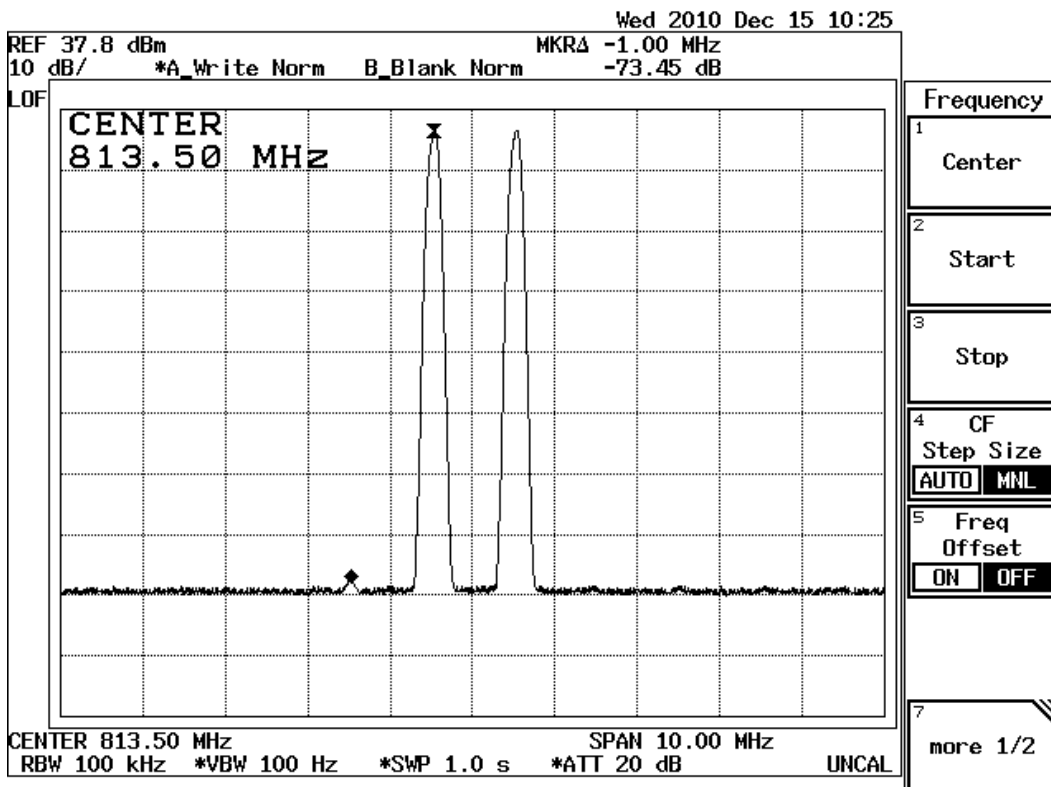
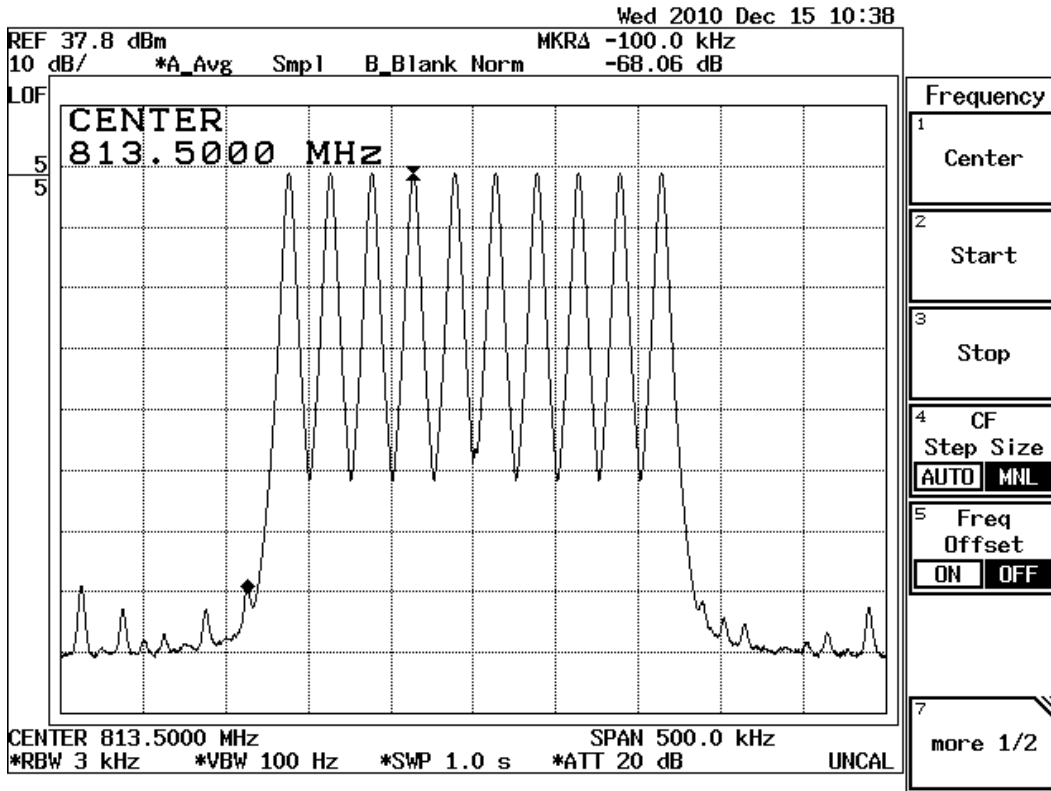
4. Pin Assignment

I/O Interface (D-Sub 9Pin Male)	1.	+27V_IN	
	2.	+27V_IN	
	3.	En/Disable Control	High (Disable) Open & Low (Enable)
	4.	GND_IN	
	5.	GND_IN	
	6.	Over Power Alarm	35dBm
	7.	VSWR Alarm	30dBm(Output Open)
	8.	High Temp. Alarm	High (shut-down) Low (Normal) Alarm &Shutdown +90°C ↑ Auto Recovery +70°C ↓
	9.	FWD Power Monitor	4V / 33dBm
DC INPUT Connector (D-Sub 9Pin Male)	1,2		+27V
	4,5		GND



5. Electrical Test Data

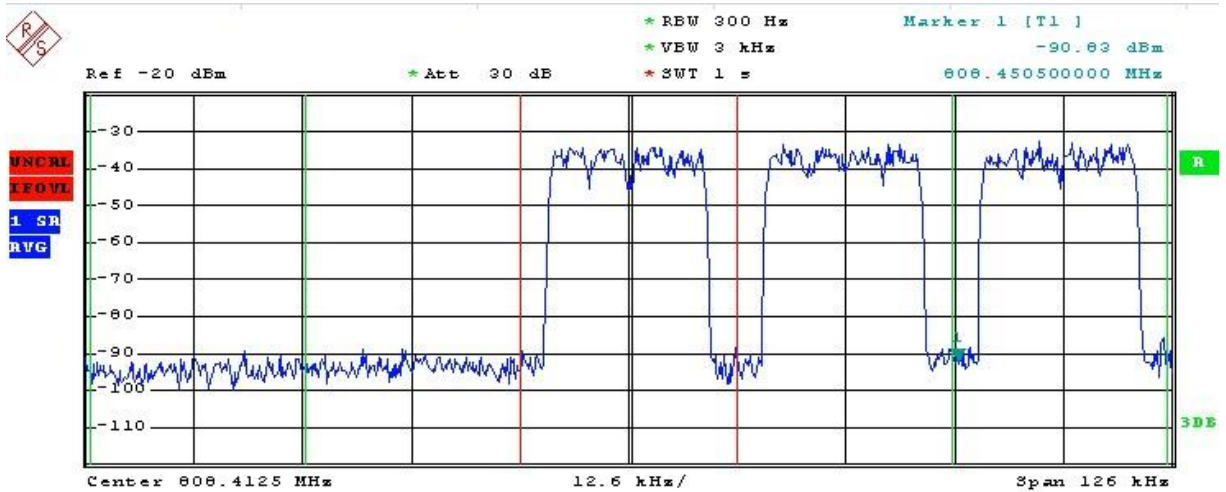
5.1 IMD @Po=+33dBm(CW 10 Tone / CW 2 Tone) / DC 27V, 1.2A



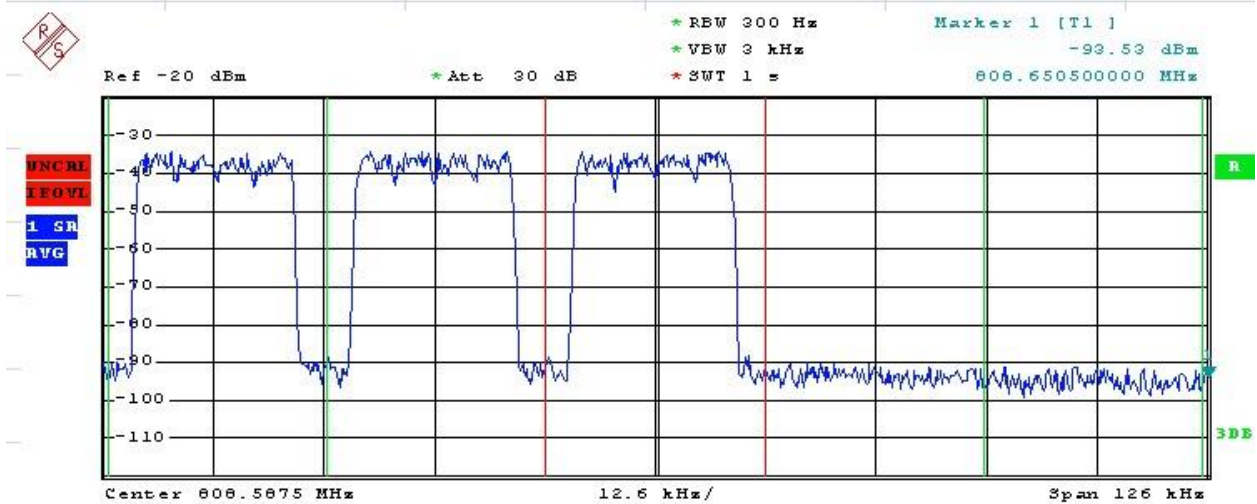


5.2 i-Den MCPA Multi Carrier Test :

i-Den 8FA Multi Tone IMD @Po=+33dBm DC 27V, 1.2A



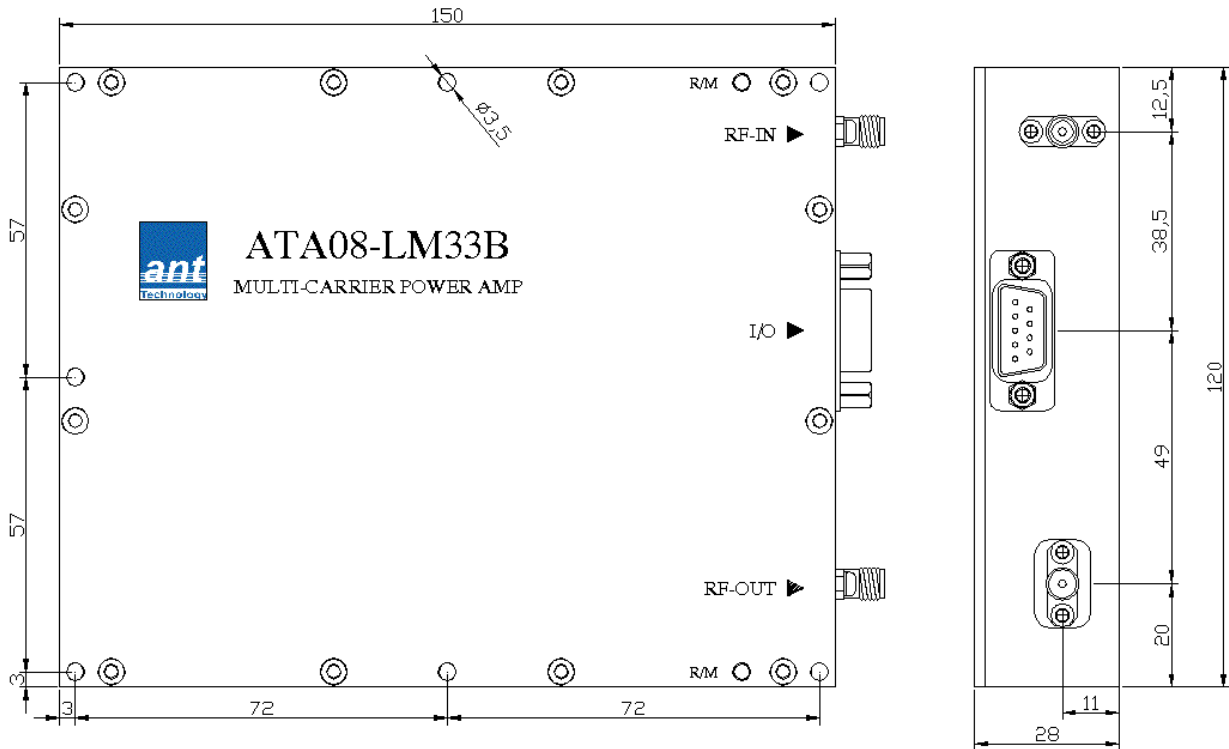
Tx Channel			
Bandwidth	25 kHz	Power	-19.56 dBm
Adjacent Channel			
Bandwidth	25 kHz	Lower	-54.67 dB
Spacing	25 kHz	Upper	-0.05 dB
Alternate Channel			
Bandwidth	25 kHz	Lower	-55.71 dB
Spacing	50 kHz	Upper	0.01 dB



Tx Channel			
Bandwidth	25 kHz	Power	-19.66 dBm
Adjacent Channel			
Bandwidth	25 kHz	Lower	-0.06 dB
Spacing	25 kHz	Upper	-54.50 dB
Alternate Channel			
Bandwidth	25 kHz	Lower	-0.40 dB
Spacing	50 kHz	Upper	-55.85 dB



6. Outline Drawing



7. Photo

