



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	851MHz~869MHz	18MHz BW
Output Power	40W	ALC 50W : Min 10dB
Gain	56dB±1dB	
Gain Flatness	±0.5dB	
Gain Variation Over Temp.	±1dB max	-20°C~+60°C
IMD	< -60dBc	CW 8 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	8A max.	@40W
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 : 150mm X 185mm X 28mm



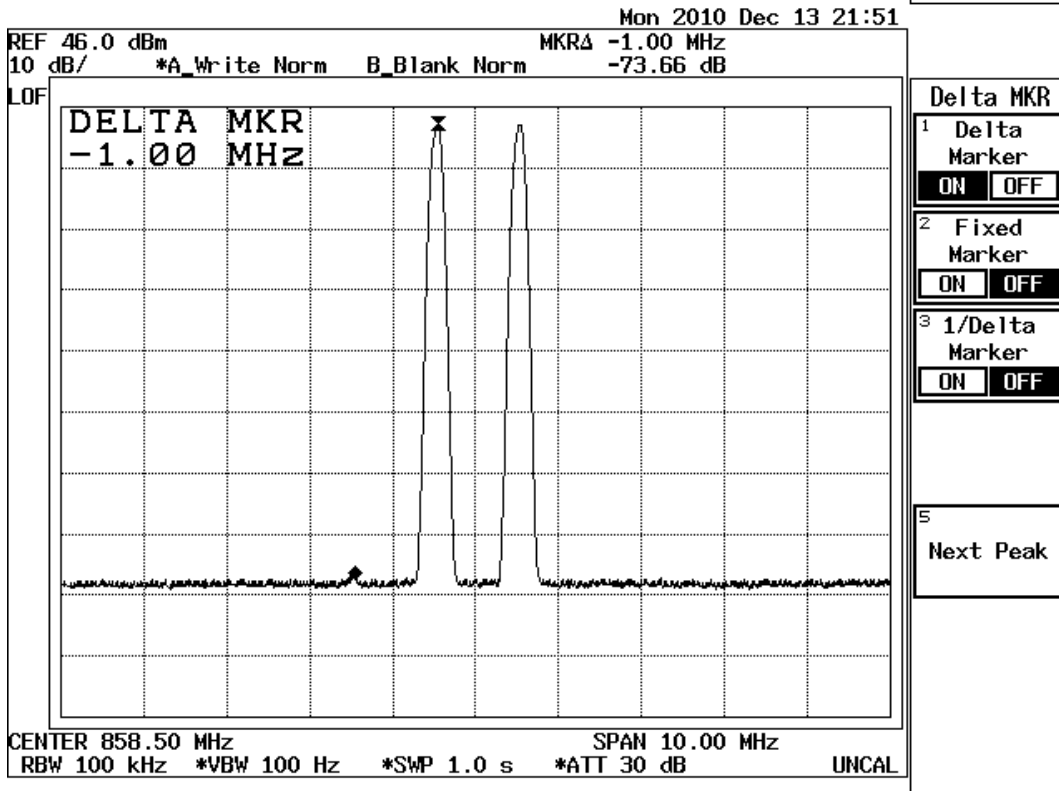
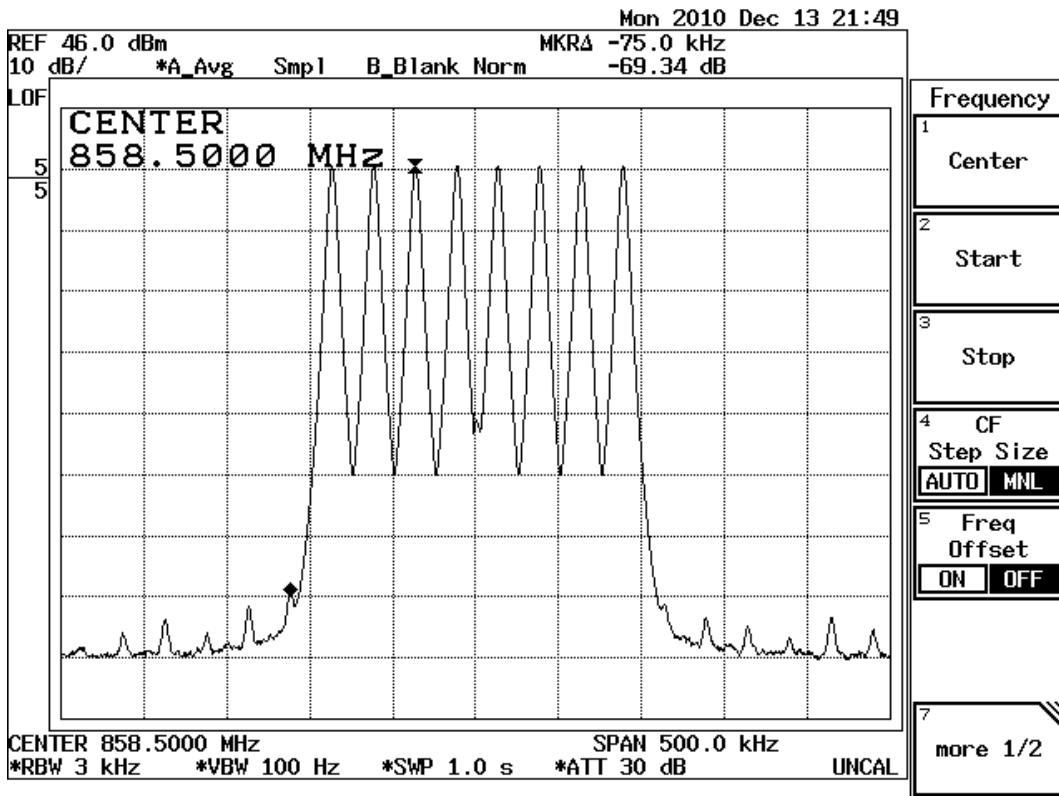
4. Pin Assignment

I/O Interface (D-Sub 9Pin Male)	1. Over Power Alarm	Po=+48dBm±1dB Shutdown High
	2. High Temp. Alarm	High (shut-down) Low (Normal) Alarm & Shutdown +90°C ↑ Auto Recovery +70°C ↓
		3. VSWR Alarm
	4. Temp. Monitor	$V_o = (T / 100) + 500mV$
	5. LPA Status	High (Inactive), Low (Active)
	6. Loop Fail Alarm	High (shut-down) Low (Normal)
		7. FWD Power Monitor
	8. Enable/Disable	High (Disable) Open & Low (Enable)
	9. GND	
	DC Fail Alarm	19V ~ 31V : Shut down 21V ~ 29V : Auto Recovery
I/O Interface (3W3P Male)	A1. VCC	+27V
	A2. GND	
	A3. N.C	



5. Electrical Test Data

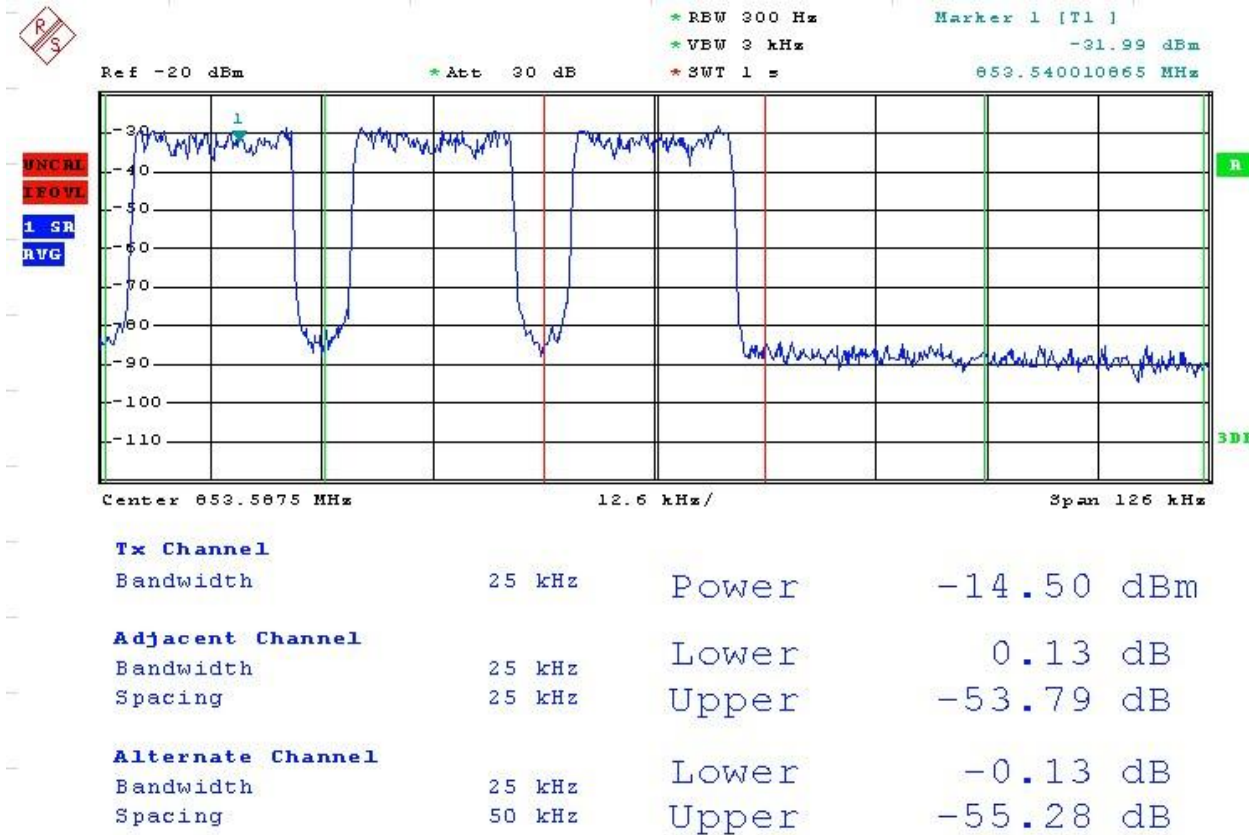
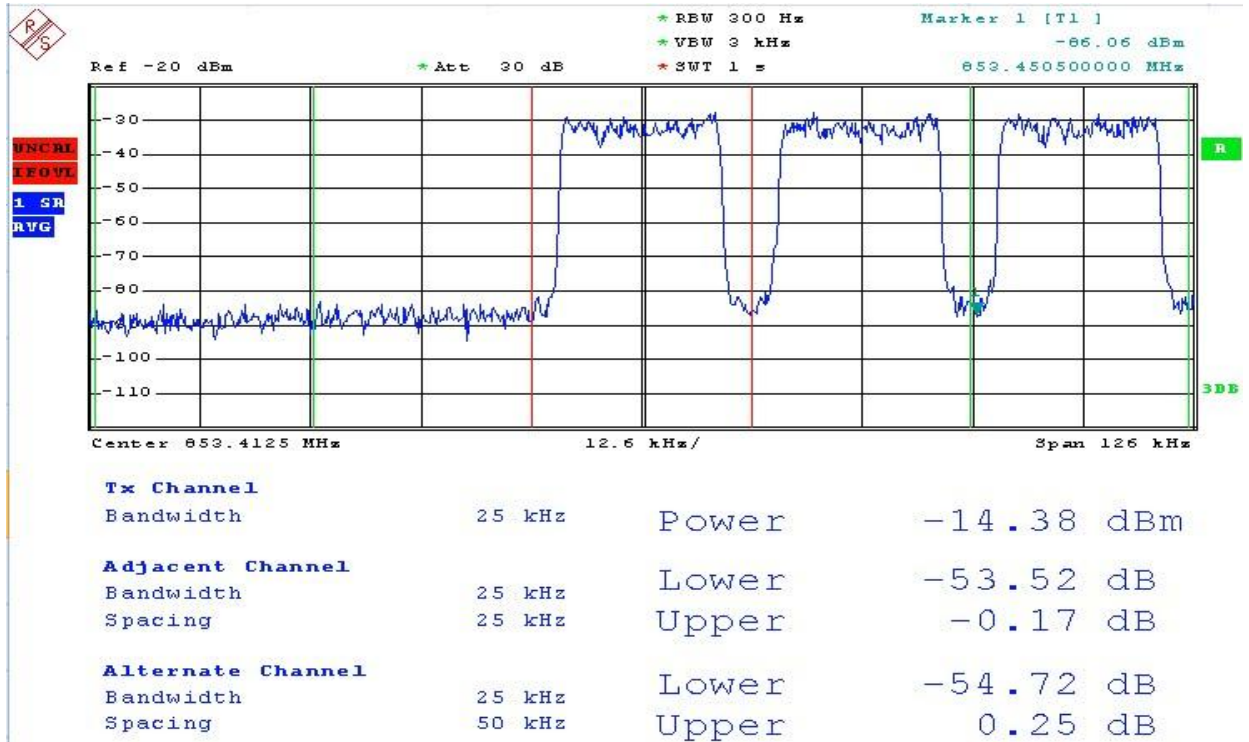
5.1 IMD @Po=+46dBm 40W (CW 8 Tone / CW 2 Tone) / DC 27V, 7.5A





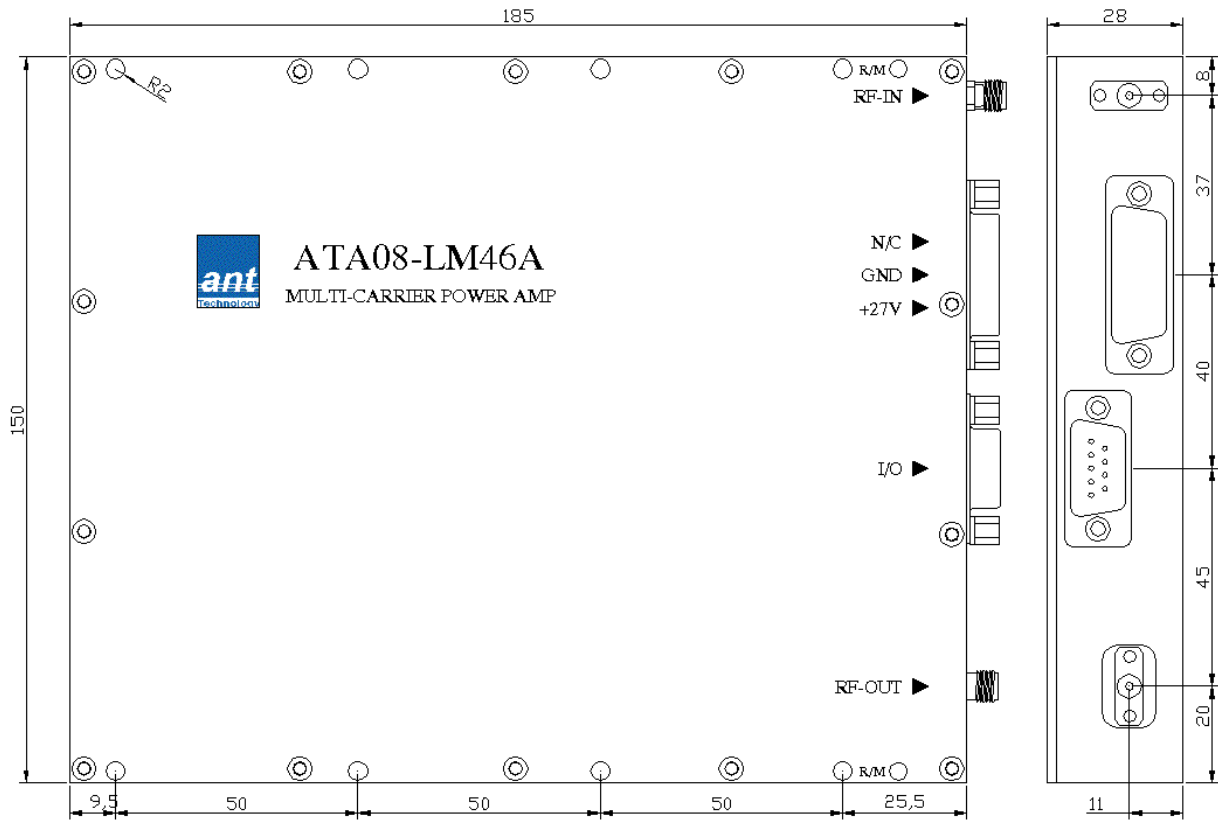
5.2 iDEN MCPA Multi Carrier Test :

IMD @Po=+44dBm 25W (iDEN 8 FA) / DC 27V, 6.6A / 25KHz B.W





6. Outline Drawing



7. Photo

