



**FEUILLE DE SPECIFICATIONS**  
*DATASHEET*

**P/N: AAMCS-AMP-2000M-6000M-50dB-47dBm-R**  
**Designation : 50W, 50dB, 2-6GHz Rack Amplifier**

## 50W, 50dB, 2000-6000MHz Amplifier



Ed.	Par / By	Le	Observation
0	Belluot	30/08/2015	Création (OC15045)




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<b>Caractéristiques électriques</b> <i>Electrical features</i>		All parameters specified @ baseplate temp.+25°C and +32Vdc unless otherwise specified	
<b>Paramètres électriques</b> <i>Electrical parameters</i>	<b>Conditions de mesure</b> <i>Measuring conditions</i>	<b>Spécifications AA-MCS</b> <i>AA-MCS specifications</i>	<b>Unités</b> <i>Units</i>
<b>Bande de fréquence</b> <i>Bandwidth</i>		2000 – 6000	MHz
<b>Puissance de sortie</b> <i>Output power</i>	CW @ Psat	46 min. 48 typ.	dBm
<b>Puissance d'entrée</b> <i>Input power</i>	@ Psat <span style="color: red;">Damage level</span>	0 typ. <span style="color: red;">+3 max.</span>	dBm
<b>Gain</b> <i>Gain</i>	Small signal @ Psat	50 min. 56 typ. 48 typ.	dB
<b>Ondulation de gain</b> <i>Gain ripple</i>	Small signal @Psat	+/- 3 max. +/- 1.5 max.	dB
<b>Vitesse d'extinction RF</b> <i>Time for RF on/off (blanking)</i>	10-90% RF rise / fall time	0.5 typ. 1 max.	µs
<b>Impédance</b> <i>Impedance</i>		50	ohms
<b>TOS d'entrée</b> <i>Input VSWR</i>		1.5:1 typ. 2:1 max.	
<b>TOS de sortie</b> <i>Output VSWR</i>		1.5:1 typ.	
<b>Parasites</b> <i>Spurious</i>		-70 typ. -60 max.	dBc
<b>Harmoniques</b> <i>Harmonics</i>	H2 : 2.5 to 3.5 GHz 3.5 to 6 GHz H3	-10 typ. -5 max. -40 typ. -25 max. -40 typ. -25 max.	dBc
<b>OIP3</b> <i>OIP3</i>	2 carriers, Δ=1MHz 40dBm each	50 typ.	dBm

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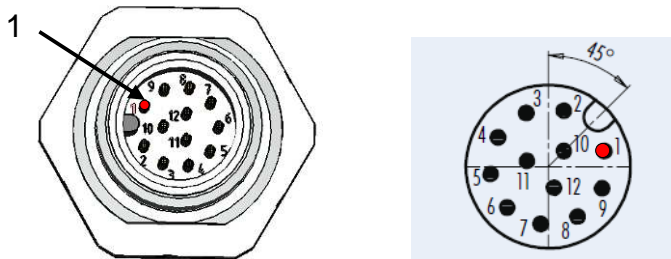
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<b>Tension d'alimentation</b> <i>Supply voltage</i>	"Vcc"	230 +/-10% 50 +/-10%	Vac Hz
<b>Consommation de courant</b> <i>Current consumption</i>	@ Psat	200 max.	VA

**Monitoring & Control interface : J1 connector (Control)**


Pin N°	Name	Wire colour	Type	Description
1	Shutdown	Brown	Ctrl ; TTL	Low = Amplifier enabled (Bias ON) High = Amplifier disabled (Bias OFF)
2	Blanking	Blue	Ctrl ; TTL	Low = RF ON High = RF OFF
3	Alarm temperature	White	Info ; TTL	High = Temperature alarm => Amplifier disabled
4,5,6,7,8,9, 10,11	Reserved			Internally connected, leave open
12	GND	Red / blue	GND	Grounded to chassis (for TTL)

**J1 pinning :**



Amplifier provided with 2m control cord (customer doesn't have to order the plug if not required).  
 The amplifier is operational without plugging the control cable (if monitoring & control is not necessary).

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Internal protection & options

Type	Included or optional items	Description
Temperature protection	<b>Included in standard configuration</b>	Auto-shutdown of the Bias if temperature of the internal module baseplate exceeds +65°C. Auto-recovery of the bias when temperature decreases below +60°C
Coupler	Option 1 (not included in standard conf.)	Directional coupler for monitoring of the forward output power
Remote control	Option 2 (not included in standard conf.)	Remote control with Man Machine Interface and microcontroller board
Gate protection	Option 3 (not included in standard conf.)	Gate current self protection
Reverse PWR protection	Option 4 (not included in standard conf.)	Reverse power ALC (automatic level control)

**Caractéristiques mécaniques**  
*Mechanical features*

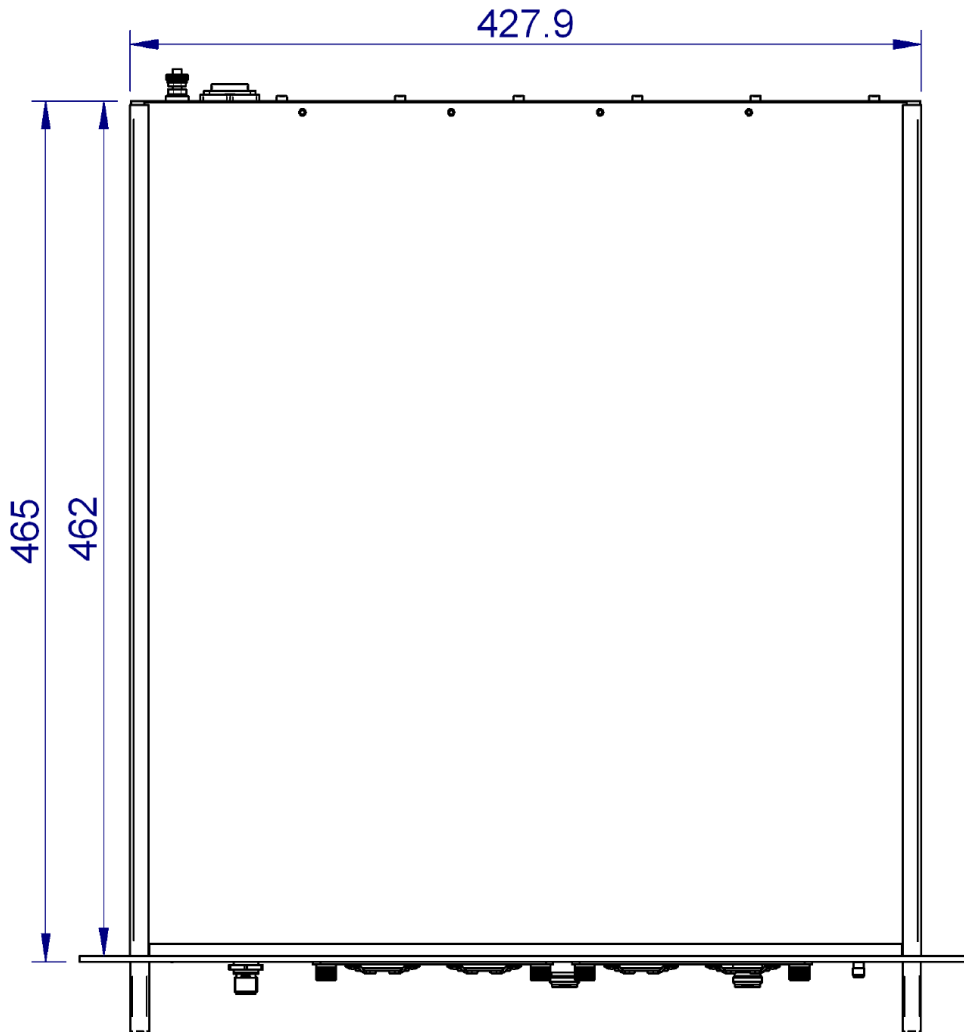
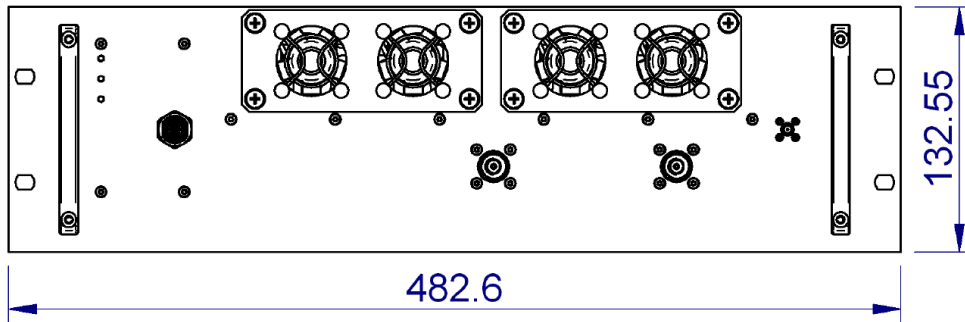
Paramètres <i>Parameters</i>	Conditions de mesure <i>Measuring conditions</i>	Spécifications AA-MCS <i>AA-MCS specifications</i>	Unités <i>Units</i>
<b>Longueur x largeur x Hauteur</b> <i>Length x width x height</i>	L x W x H ISO 2768-mH	465 x 19" x 3U (without connectors)	mm
<b>Dissipation</b> <i>Cooling</i>		Air cooled (integrated fans)	-
<b>Connectique RF</b> <i>RF Connectors</i>	Input Output 1 Output 2 (if directional coupler option chosen)	SMA female N female N female	-
<b>Connecteur de commande et d'alimentation</b> <i>Monitoring &amp; Control connector &amp; Supply</i>	J1 (Control)  J2 (Supply)	Connector M12x1 12pts male Ref.: Binder 09-3491-500-12 (amplifier provided with 2m control cable)  EIC plug	
<b>Poids</b> <i>Weight</i>		14 typ.	kg

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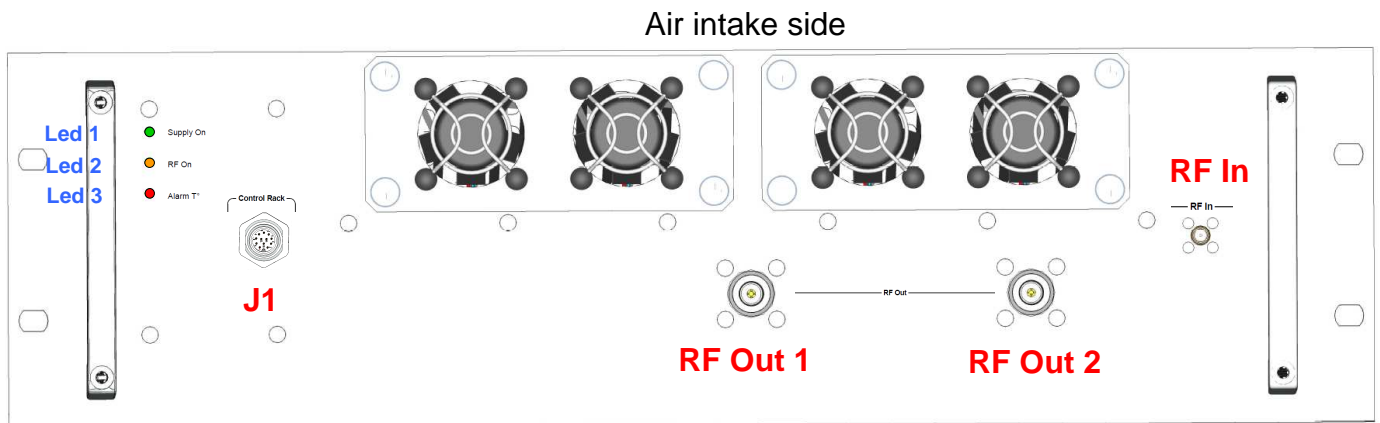
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Monitoring & Control display : Front Panel

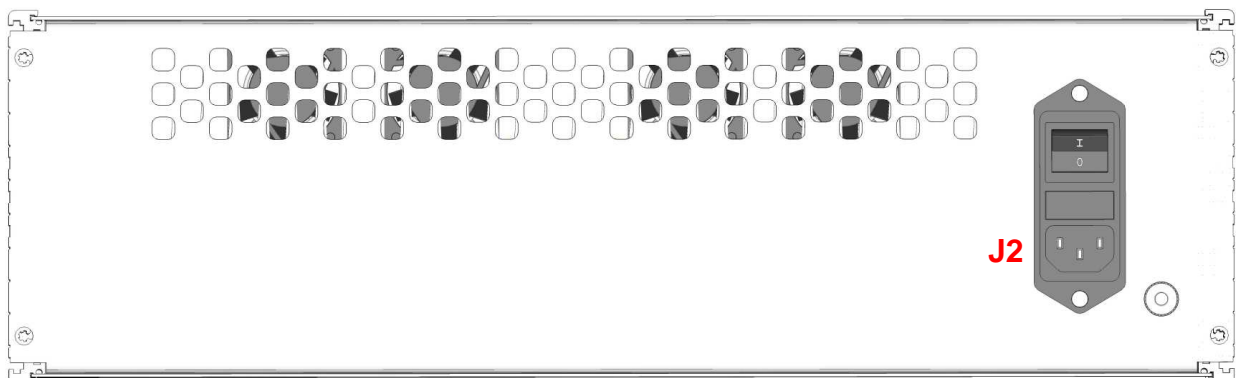
Led N°	Name	Type	Description
1	Supply On	Green Led	highlighted = supply On off = Supply Off
2	RF On	Yellow Led	highlighted = RF On (RF enabled) off = RF Off
3	Alarm T°	Red Led	highlighted = alarm temperature off = Temperature OK

**Front panel :**



**Rear Panel :**

Air exhaust side



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