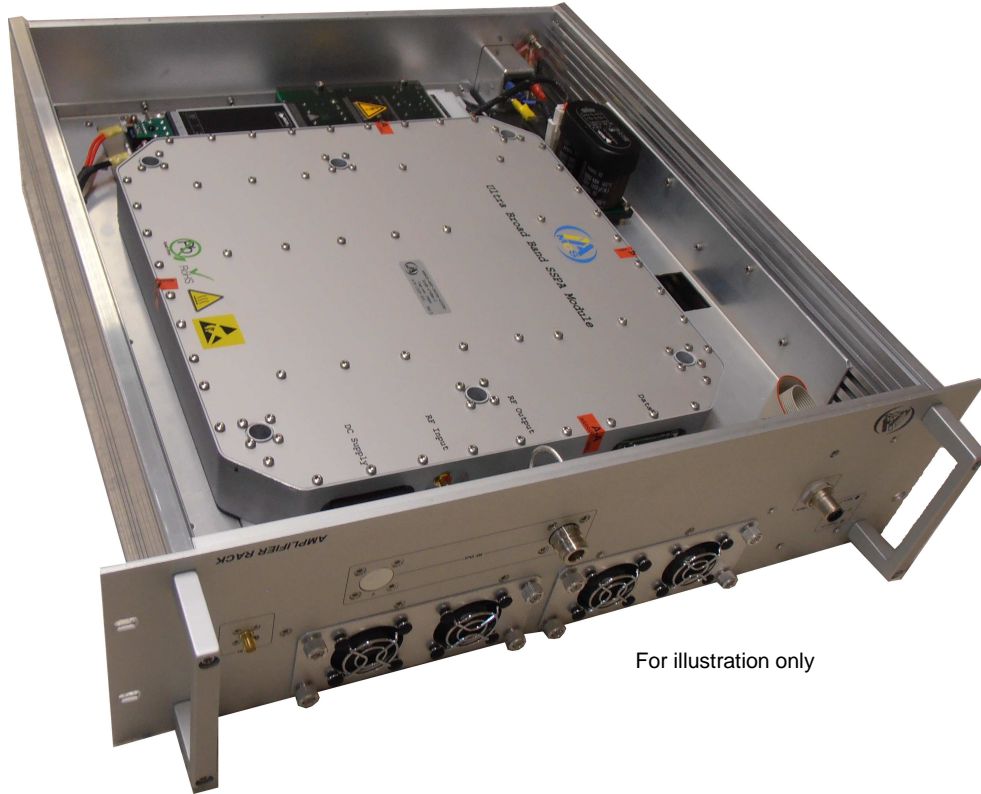




DATASHEET
Feuille de Spécifications


P/N: AAMCS-AMP-2G-18G-45dB-40dBm-R
Designation : 10W, 45dB, 2-18GHz Amplifier rack



For illustration only

2 – 18 GHz 10W power amplifier module

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0	Belluot	19/09/2016	Création (ET16005)

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	P/N: AAMCS-AMP-2G-18G-45dB-40dBm-R Designation : 10W, 45dB, 2-18GHz Amplifier rack	

Electrical features <i>Caractéristiques électriques</i>		All parameters specified @ baseplate temperature of +25°C and supply of 28Vdc, unless otherwise specified	
Electrical parameters <i>Paramètres électriques</i>	Measuring conditions <i>Conditions de mesure</i>	AA-MCS specifications <i>Spécifications AA-MCS</i>	Units <i>Unités</i>
Bandwidth <i>Bande de fréquence</i>		2 - 18	GHz
Output power <i>Puissance de sortie</i>	CW @ Psat	39 min. 40 typ.	dBm
Input power <i>Puissance d'entrée</i>	CW @ Psat Maximum level	-5 to 0 0 max.	dBm
Gain <i>Gain</i>	@ 0dBm input power CW	39 min. 40 typ. (includes gain compensation versus temperature)	dB
In band Gain ripple <i>Ondulation de gain</i>	@ 0dBm input power	+/- 2 max.	dB
Impedance <i>Impedance</i>		50	ohms
Input / Output VSWR <i>TOS d'entrée / sortie</i>	Input Output	3 :1 max. 2:1 typ. 3 :1 max. 2:1 typ.	-
Load mismatch <i>Résistance au TOS de charge</i>		3:1 max.	
Time for RF on/off (blinking) <i>Vitesse d'extinction RF</i>	10-90% RF rise / fall time	0.5 typ. 1 max.	µs
Power density in blanking mode <i>Densité spectrale de puissance</i>	In 2 MHz BW	-120 max. RF switch in TX path and gate bias cut-off	dBm
Harmonics <i>Distortion harmonique</i>	H2 (fond. in 2-12GHz) H3 (fond. In 2-8GHz)	-20 typ. -12 max. -15 typ. -12 max.	dBc
Spurious <i>Parasites</i>	@ Psat	-60 max.	dBc
Operating class <i>Classe de fonctionnement</i>		AB on GaN devices	

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Electrical features <i>Caractéristiques électriques</i>			
Electrical specifications <i>Caractéristiques électriques</i>	Measuring conditions <i>Conditions de mesure</i>	AA-MCS specifications <i>Spécifications AA-MCS</i>	Units <i>Unités</i>
Supply voltage <i>Tension d'alimentation</i>		230 +/-10% 50 +/-10%	Vac Hz
Temperature voltage monitoring <i>Tension de control température</i>	Positive slope	10mV x T(°C) -300mV@ -30°C 0V @ 0°C +600mV@ +60°C	
Consumption <i>Consommation</i>	@ Psat	2 max.	A rms

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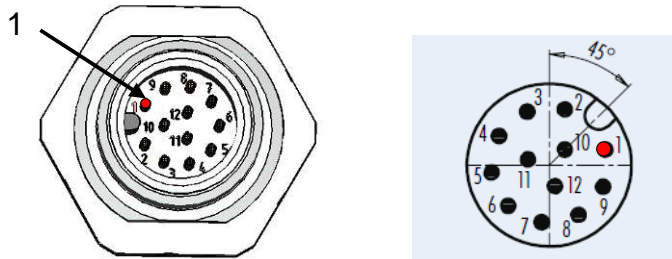
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Monitoring & Control interface : J1 connector

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
6	Temperature monitor	Yellow	Info ; analog	Temperature indication: -5 to +5Vdc
4,5,7,8,9, 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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Caractéristiques mécaniques
Mechanical features

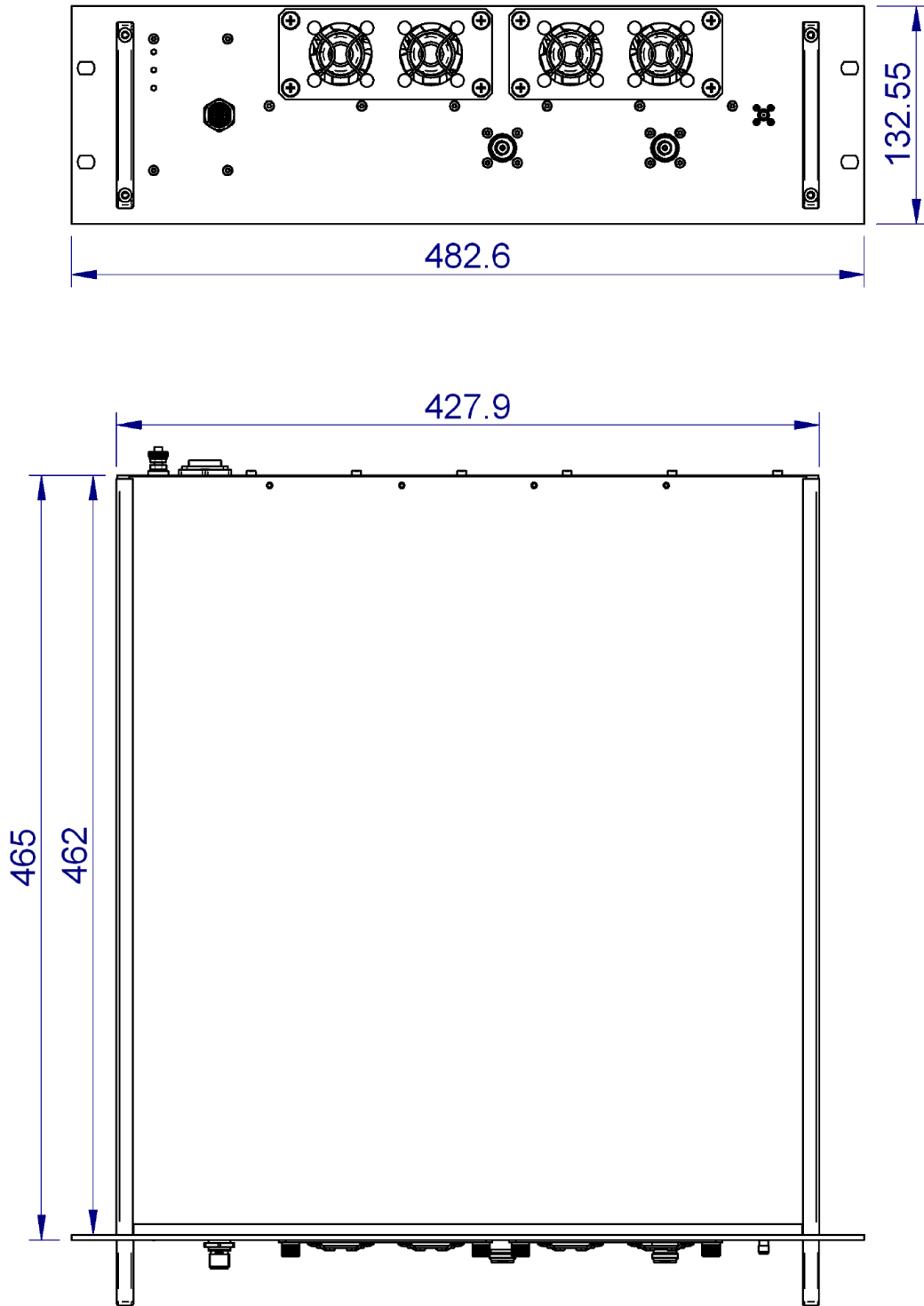
Paramètres <i>Parameters</i>	Conditions de mesure <i>Measuring conditions</i>	Spécifications AA-MCS <i>AA-MCS specifications</i>	Unités <i>Units</i>
Longueur x largeur x Hauteur <i>Length x width x height</i>	L x W x H ISO 2768-mH	465 x 19" x 3U (without connectors)	mm
Dissipation <i>Cooling</i>		Air cooled (integrated fans)	-
Temperature opérationnelle <i>Operating temperature range</i>	Room temperature	-10 min. +55 max.	°C
Connectique RF <i>RF Connectors</i>	Input Output 1	SMA female N female	-
Connecteur de commande et d'alimentation <i>Monitoring & Control connector & Supply</i>	J1 (Control) J2 (Supply)	Connector M12x1 12pts male Ref.: Binder 09-3491-500-12 (amplifier provided with 2m control cable) EIC plug	
Masse <i>Weight</i>		15 typ.	kg
RoHs <i>RoHs</i>		compliant	

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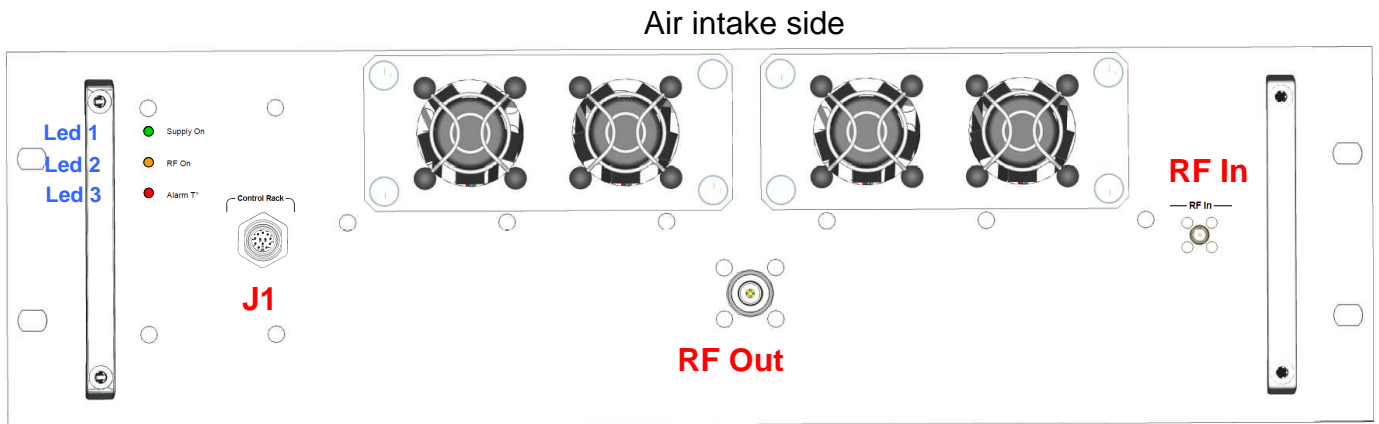
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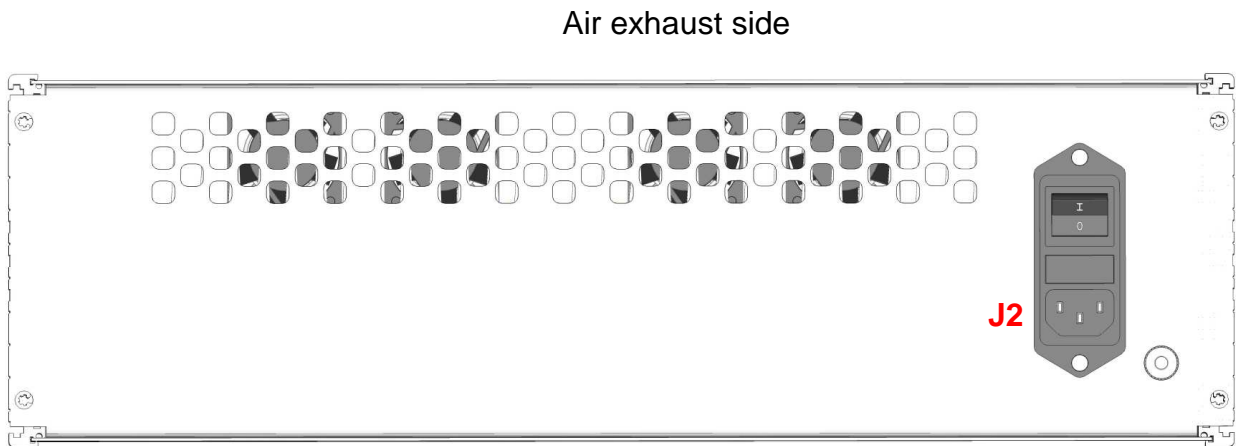
Monitoring & Control display : Front Panel

Pin 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 :



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