

## Product Specifications

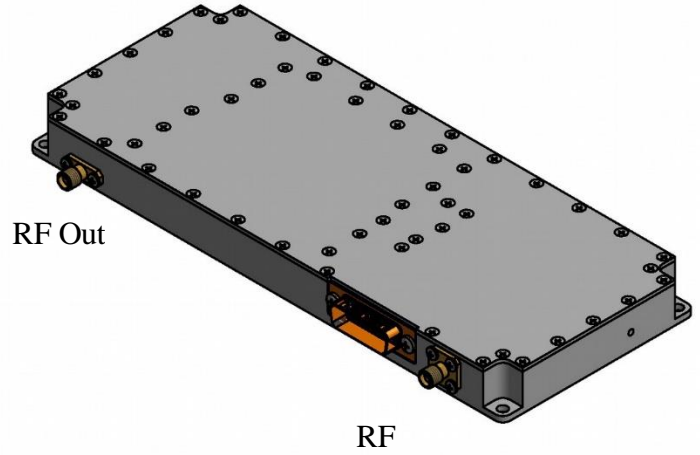
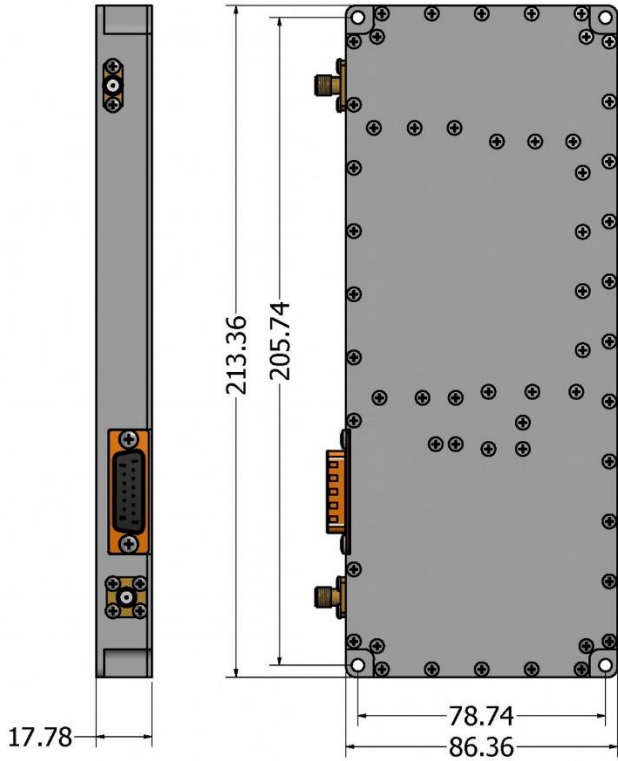
### CMIPA-806-1 LTE BAND POWER AMPLIFIER

Frequency Range	791-821 MHz
Output Power [Psat]	30W Typ [CW 1 tone]
Output Power [P1dB]	20W Min [CW 1 tone]
Small Signal Gain	45 ± 1 dB Typ
Gain Flatness	± 1.5 dB Typ
Input VSWR	2:1 Max
Output VSWR	2:1 Max
Third Order Intercept Point 2-Tone @33dBm/Tone, 200kHz Spacing	+55dBm Typ +53dBm Min
Harmonics @ Pout = 20W	-50dBc Typ, -45dBc Max
Spurious Signals	-70dBc Typ, -60dBc Max
Mismatch Protection	Isolator
Normal Operating Voltage	+28 ±2 VDC
Quiescent Current	500mA
DC Current Consumption @ Pout=20W	1.8 A Typ, 2 A max
Operating Temperature	-20°C - +55°C
Start Up Temperature	-45°C
Storage Temperature	-45°C - +85°C
RF Connectors	SMA Female
Power Connector	15 Pin Dsub
Weight	0.5 kg

**Important:** case temperature cannot exceed 55°C Mounting plate: mount on a surface conducting heat away and/or use active cooling such as fans to maintain case temperature.

## Interface Connector Pin Out

Pin #	Name	Description	Specification	Signal Type
1	VDD	DC Power Input	+28VDC +/-2VDC	Input
2	VDD	DC Power Input	+28VDC +/-2VDC	Input
3	Return	Power and Signal Return	Ground	Output
4	Return	Power and Signal Return	Ground	Output
5	ALC Voltage	ALC Loop Control Voltage	0-1.3 VDC, Max Gain = 0V	Output
6	Mute Input	Sets amplifier to minimum gain	Normal: High Impedance > 160K ohms Minimum Gain: Pull Down <= 1K ohms	Input
7	Over Temperature Fault	Indicates device temperature is above limit	Normal= 11K pull up to +5V Fault= 1K ohm sink	Output
8	Input Fault	Low RF input level indicator	Normal= 11K pull up to +5V Fault= 1K ohm sink	Output
9	VSWR Fault	High reflected RF output power indicator	Normal= 11K pull up to +5V Fault= 1K ohm sink	Output
10	ReflectedOutput Power	Analog signal representing reflected RF output power	0-5V max power = 5V	Output
11	Over Drive Fault	High RF input level indicator	Normal= 11K pull up to +5V Fault= 1K ohm sink	Output
12	ForwardOutput Power	Analog signal representing forward RF output power	0-5V max power = 5V	Output
13	ALC Level	Analog gain control signal	0-5V 0V= min gain 5V= max gain	Input
14	High Output Power Fault	High RF output level indicator	Normal= 11K pull up to +5V Fault= 1K ohm sink	Output
15	ALC Disable	Disables Automatic Level Control loop	ALC On= Open or CMOS Logic Low ALC Off= +5V CMOS Logic High	Input



All Dimensions In mm