



# CORRY MICRONICS, INC PRODUCT SPECIFICATION

## LTE 1805-1880-45 LTE Power Amplifier 1805 -1880 MHz 45 Watts

### Functions

Num.	Description
1	ALC Point Control and Read
2	ALC on/Off Control and Read
3	PA Mute On/Off Control and Read
4	Digital Attenuator Control
5	Operating Temperature Monitor and Alarm
6	Output Power Monitor
7	Reverse Power Monitor and Alarm
8	DC Current Monitor and Alarm
9	Protected Against High Reflective Power

### Environmental Specifications

Parameter	Specification
Max Base Plate Operating Temp.	0° to +85° C Shutdown @ 90° C
Relative Humidity	5% ~ 96 %
Atmospheric Pressure	70 kPa ~ 106 kPa
Cooling	Not provided, User Supplied

**CALL OUR SALES DEPARTMENT FOR MORE INFORMATION OR VARIATIONS OF THIS PRODUCT.**

**Corry Micronics, Inc. One Plastics Rd. - Corry, PA 16407**  
**(724) 940-7556 ext. 138 Fax (724) 940-7707 [www.cormic.com](http://www.cormic.com)**

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### Electrical Specifications

Parameter	Specification
Frequency	1805 – 1880 MHz
Signal Type	LTE, PAR 9.8 dB @ 0.01%
Nominal Output Power	45 W
Nominal Gain	51 dB
ACLR	$\leq -45\text{dBc}$
EVM (Max)	$< 8\%$ @ Specified Output Power
Gain w/ ALC off +/- 1db	51 $\pm$ 1.5 dB (Room Temperature/ Value of attenuator 8.5 dB) 51 $\pm$ 2 dB (Low and High Temperature/ Value of attenuator 8.5 dB)
Input Return Loss	18 dB
Output Return Loss	18 dB
Tx ALC control range vs. Tx input level change, Min	16 dB (Nominal Input +/- 8 dB)
ALC Set Range	16 dB (46.5 ~ 31.5 dBm)
ALC Set Step	0.5 dB
ALC Control Accuracy	$\pm 1$ dB
Attenuator Set Range (ALC Off)	31 dB
Attenuator Set Step (ALC Off)	0.25 dB
Max Input Level, No Damage and Degradation	0 dBm (Adjust the attenuator to maintain output power)
Noise Figure (ALC Off)	$\leq 10$ dB
DC Power	+28V
Efficiency	$\geq 25\%$ @ 45 W

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Output Load Mismatch Tolerance	Isolator Protected
Power Consumption when Muted	< 5 W
Forward Power Monitor	Range: 30 dB, 50 dBm ~ 21 dBm Resolution: 0.1 dBm Accuracy: ± 2 dB
Reverse Power Monitor	Range: 30 dB, 50 dBm ~ 21 dBm Resolution: 0.1 dBm Accuracy: ± 2 dB
DC Current Monitor	Range: 0 - 15 A Resolution: 0.1A Accuracy: ± 5 %
Temperature Monitor	Range: -40° C ~ +105° C Resolution: 1° C Accuracy: ± 3° C
RF Connectors	SMA Female
Power Connector	M3 Screw Terminal
Control Connector	4 Position 2.5 mm Pitch Header Mates With JST XHP-4
Dimensions	See Attached Drawing (Dimensions are in mm)

### Control Pins

Pin Number	Description
1	GND
2	RS484_A
3	RS485_B
4	NC

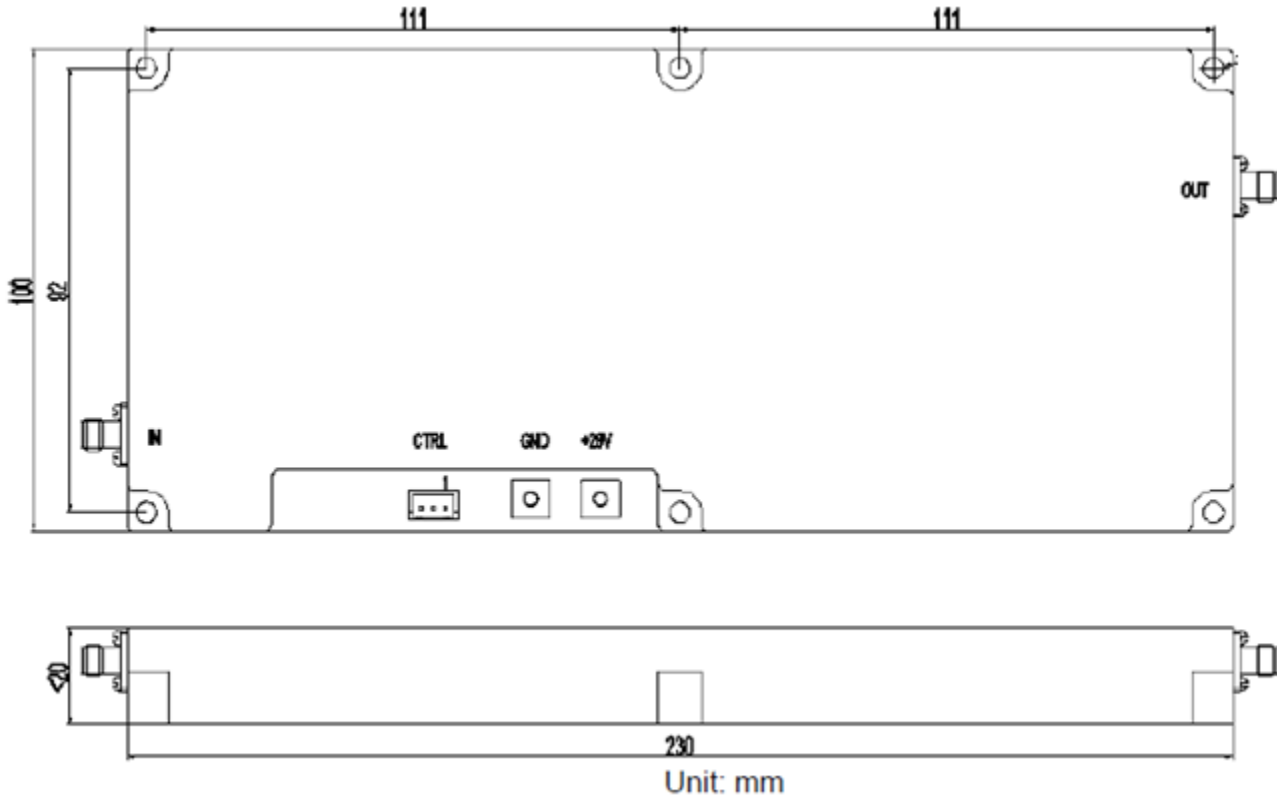
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## Outline Drawing



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