

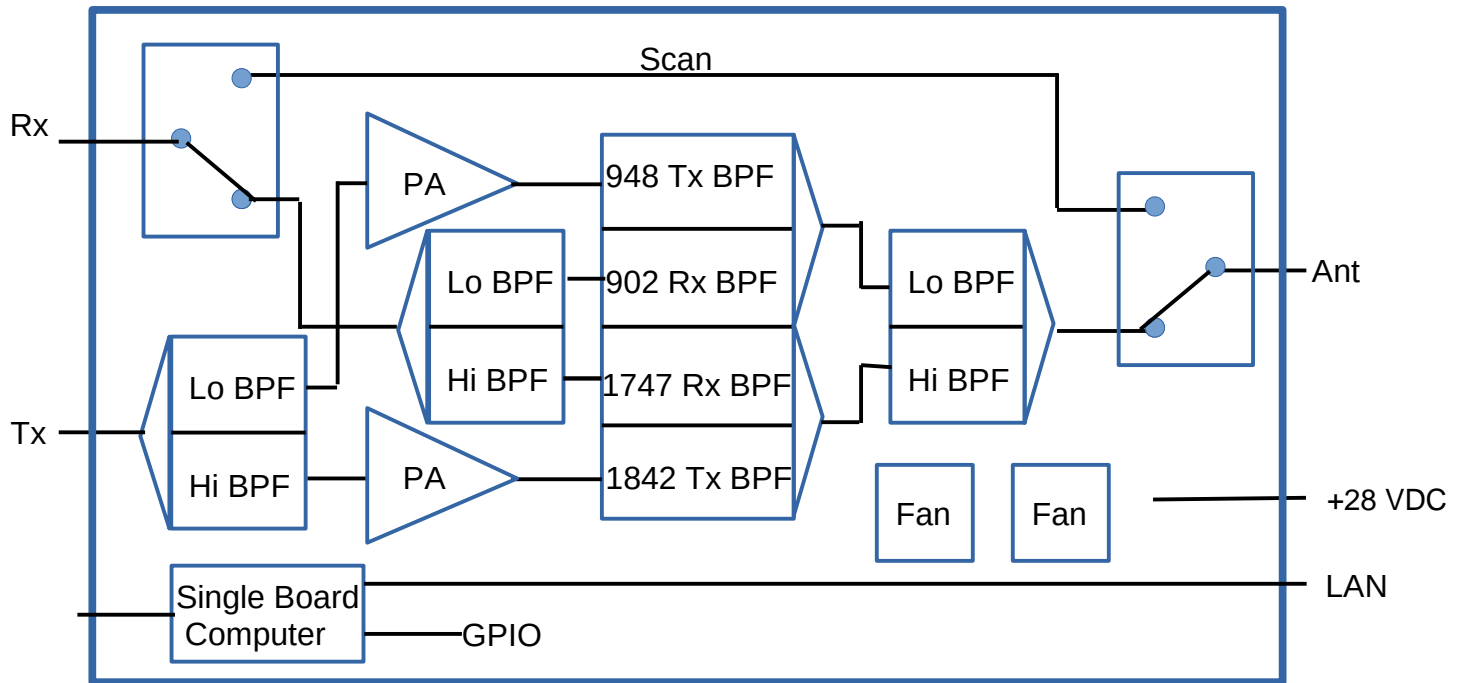


CORRY MICRONICS, INC PRODUCT SPECIFICATION

GSMMOD-900-1800M

900 MHz / 1800 MHz GSM Filter and Amplifier Module

The GSMMOD-900-1800M is a filter and amplifier module for GSM signals in the 900MHz and 1800 MHz bands that is designed to mount in a double slot of a four slot 3U, 19" chassis. It has separate low power level Receive and Transmit ports for interfacing to a Software Defined Radio and provides the necessary filtering to combine the Receive and Transmit signals onto a common output port for connection to an antenna. The module also features the ability to connect the Receive port directly to the antenna port, bypassing all amplifier and filtering functions, to allow a broadband measurement of ambient signals received at the antenna port. The module can be monitored and controlled over a LAN.



Module Block Diagram

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

Corry Micronics Inc. herein referred to CMI, believes this information to be accurate, but makes no warranties, expressed or implied as to the accuracy of this document. CMI assumes no liability for any injury, loss, damage, direct or consequential arising from the use of our products. User assumes all risk whatsoever in connection with its intended use. CMI also reserves the right to change this document without notice. 5/01/2019



CORRY MICRONICS, INC PRODUCT SPECIFICATION

Electrical Specifications

Parameter	Specification	
	Low Band	High Band
Frequency Range Tx	935-960 MHz	1805-1880 MHz
Frequency Range Rx	890-915 MHz	1710-1785 MHz
Isolation Tx to Rx	85 dB Min	
Signal Type	GSM	
Insertion Loss Rx to Antenna Port	3.5 dB	
Nominal Gain- Tx to Antenna ports ALC On	30 dB	
Nominal Gain- Tx to Antenna ports ALC Off	30 dB (+/- 1 dB) (+/1.5dB over temperature)	
Nominal Output Power	16 W	
ALC Control Range	16dB (+/- 8dB nominal)	
ALC Set Range	16dB (42dBm-27dBm), tested with CW signal	
ALC Control Accuracy	+/-1dB, tested with CW signal	
EVM @ Nominal Output with ALC On	8% Max	
Tx Noise Figure @ Nominal Gain	15 dB Max	
Tx/ Rx RF Input Connectors	SMA Female	
Antenna Port Connector	Type N Female	
Tx /Rx/ Antenna Ports Return Loss	15 dB	
Supply Voltage	+28VDC	
Power Consumption at Nominal Output Power	215 W	
Power Consumption when Muted	5 W max	
Output Load Mismatch Protection	Amplifier output protected with circulator	
LAN Port	10/100 BASE-T	

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

Corry Micronics Inc. herein referred to CMI, believes this information to be accurate, but makes no warranties, expressed or implied as to the accuracy of this document. CMI assumes no liability for any injury, loss, damage, direct or consequential arising from the use of our products. User assumes all risk whatsoever in connection with its intended use. CMI also reserves the right to change this document without notice. 05/01/2019



CORRY MICRONICS, INC PRODUCT SPECIFICATION

Mechanical / Environmental Specifications

Parameter	Specification
Dimensions	See drawing
Weight	10 kg
Operating Temperature	0 – 50 degrees C

Control / Indicators

Feature	Description
DC Power Connector	Rear Panel Mounted Locking Plug Molex P/N 0194290026 Mates to Molex P/N 19418-0007
DC Power Switch	Front Panel Mounted 10A Circuit Breaker
DC Power Indicator	Front Panel LED Illuminated= DC Voltage Connected and Switched On
RF Power Indicator	2 Front Panel LEDs (1 High Band / 1 Low Band) Illuminated Green= RF Power Above Threshold Illuminated Red= RF Power Below Threshold
Status LED	Front Panel LED Indicating Module Status Booting: Blinking Green Healthy: Solid Green Alarm: Blinking Red Processor Fault: Solid Red
Reset / Default Settings	Recessed Switch Accessible Through Front Panel
Control and Communications Protocol	Secure Command over TCP/IP
Control and Communications Connector Type	Rear Panel Mounted RJ45
GPIO (future use)	5 Inputs, 5 Outputs Opto Coupler Output, with Common Return Digital Current Loop Inputs, with Common Return
GPIO Connector Type, located internal to module	Micro Dsub15 Pin Female

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

Corry Micronics Inc. herein referred to CMI, believes this information to be accurate, but makes no warranties, expressed or implied as to the accuracy of this document. CMI assumes no liability for any injury, loss, damage, direct or consequential arising from the use of our products. User assumes all risk whatsoever in connection with its intended use. CMI also reserves the right to change this document without notice. 05/01/2019



CORRY MICRONICS, INC PRODUCT SPECIFICATION

TCP/IP Parameters

Name	Type	Description	Range	Resolution	Accuracy
ALC	Control	Turns Amplifier ALC Function On and Off ALC Off Sets Amplifier to Nominal Gain	On / Off	N/A	N/A
ALC Setpoint	Control	Sets Output Power Maintained by ALC Does Not Operate when ALC is Off	42dBm-27dBm	0.5dB	+/-1dB with CW signal
Mute	Control	Reduces Amplifier Output to a Low Level Safe for Output Switching	On/Off	N/A	N/A
Scan	Control	Connects Rx Port Directly to Antenna Port, Bypassing Filtering and Amplifier	On/Off	N/A	N/A
Forward Power	Status	RF Output Power from Amplifier	30dB, 45dBm-16dBm	0.1 dBm	+/-2dB
Reverse Power	Status	RF Power Reflecting into the Amplifier	30dB, 45dBm-16dBm	0.1 dBm	+/-2dB
Temperature	Status	Present Amplifier Temperature	-40C to +105C	1C	+/-3C
Return Loss	Status	Calculated Amplifier Load Return Loss	30dB, 0db- 30dB	.1dB	+/-4dB
DC Current	Status	Amplifier Current Draw	0-15 A	0.1A	+/-5%
Fan Alarm	Status	Fan Malfunction Alarm	On/Off	N/A	N/A
Over Temp Alarm	Status	Amplifier High Temperature Alarm	On/Off	N/A	N/A
Return Loss Alarm	Status	Alarm Indicating Return Loss is Below the Threshold	On/Off	N/A	N/A

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

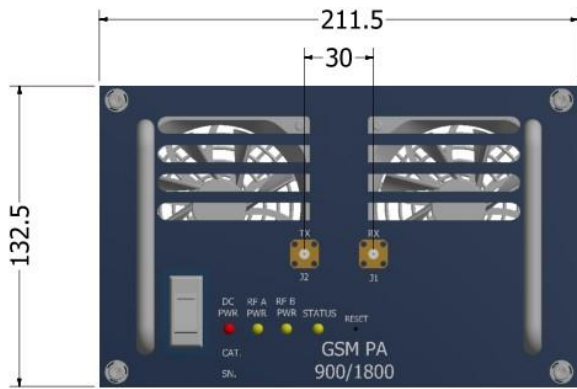
Corry Micronics, Inc. One Plastics Rd. - Corry, PA 16407
(724) 940-7556 ext. 138 Fax (724) 940-7707 www.cormic.com

Corry Micronics Inc. herein referred to CMI, believes this information to be accurate, but makes no warranties, expressed or implied as to the accuracy of this document. CMI assumes no liability for any injury, loss, damage, direct or consequential arising from the use of our products. User assumes all risk whatsoever in connection with its intended use. CMI also reserves the right to change this document without notice. 05/01/2019

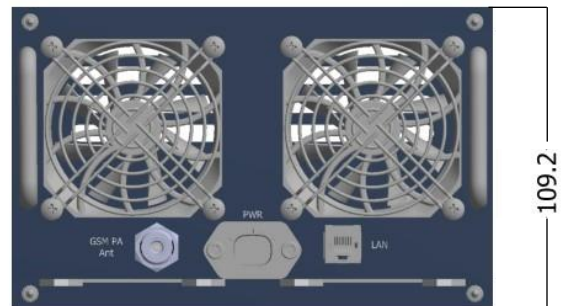


CORRY MICRONICS, INC PRODUCT SPECIFICATION

Mechanical Drawing



FRONT



BACK



Dimensions in mm

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

Corry Micronics Inc. herein referred to CMI, believes this information to be accurate, but makes no warranties, expressed or implied as to the accuracy of this document. CMI assumes no liability for any injury, loss, damage, direct or consequential arising from the use of our products. User assumes all risk whatsoever in connection with its intended use. CMI also reserves the right to change this document without notice. 05/01/2019



CORRY MICRONICS, INC PRODUCT SPECIFICATION

Isometric View



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

Corry Micronics Inc. herein referred to CMI, believes this information to be accurate, but makes no warranties, expressed or implied as to the accuracy of this document. CMI assumes no liability for any injury, loss, damage, direct or consequential arising from the use of our products. User assumes all risk whatsoever in connection with its intended use. CMI also reserves the right to change this document without notice. 05/01/2019