

E-GSM900 Series Single Carrier Power Amplifiers



- 50, 125 and 250 Watt Modular Versions
- Mix and Match Power Capability
- LDMOS Performance and Reliability
- Unsurpassed AML Technical Support

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E-GSM 900 Series Single Carrier Power Amplifier

Functional Description

The E-GSM 900 series of single channel power amplifier modules is a continuation of the AML Communications LDMOS power amplifier product line. Characterized by rugged performance and high efficiency, these modules are available in 50, 125, and 250 Watt versions. A standard 19" compatible rack mounting chassis that can hold up to six 50 Watt or 125 Watt modules, or up to three 250 Watt modules is available.

This low cost chassis supports intermixing of units to provide flexibility and cost efficiency in deployment, and a migration path to support increased traffic. Each module incorporates remote enable capability, as well as providing self protection and monitoring outputs for connection to the host equipment. Replacement fan modules ease maintenance requirements.

General Specifications

Frequency

925 to 960 MHz

Output Power

E-GSM 900-50, 50 Watts
E-GSM 900-125, 125 Watts
E-GSM 900-250, 250 Watts

Gain

E-GSM 900-50, 32 dB nominal
E-GSM 900-125, 36 dB nominal
E-GSM 900-250, 39 dB nominal

Format

Global System for Mobile communication
(GSM 05.05)

Output Intermodulation

Meets or exceeds all applicable portions of
GSM 05.05 for base station equipment

Gain Flatness

+/- 0.5 dB max.

VSWR Input and Output

1.5:1 max.

Gain Change

+/- 0.5 dB max. 0° C to +50° C

Load Stability

Infinite VSWR, Isolator protected

DC Power

E-GSM 900-50, 23 to 28 VDC @ 6.0 Amps max.
E-GSM 900-125, 23 to 28 VDC @ 17.0 Amps max.
E-GSM 900-250, 23 to 28 VDC @ 34.0 Amps max.

Maximum Operating Input Power

+15 dBm +/- 1 dB max.

Ambient Operating Temperature

0° C to +50° C

Ambient Storage Temperature

-40° C to 85° C

Mechanical

E-GSM 900-50, 7.3" H x 2.5" W x 16.5" L
E-GSM 900-125, 7.3" H x 2.5" W x 16.5" L
E-GSM 900-250, 7.3" H x 5.0" W x 16.5" L
The mounting chassis is a 19" rack mount configuration, 8.75" tall that can house up to six 50 watt units ; six 125 watt units ; three 250 watt units or any combination.

Weight:

E-GSM 900-50, each 10 lbs. nominal
E-GSM 900-125, each 10 lbs. nominal
E-GSM 900-250, each 15 lbs. nominal
Mounting Chassis, 14 lbs. nominal

Connectors

Input - type "SMA" (f)
Output - type "N" (f)

Alarms

Provided as open collectors which are active "high" for fault condition

- GainFault
- Summary fault, indicates if any alarm is active
- Over current alarm
- Over temperature alarm
- VSWR alarm
- OverTemperature Shutdown

Control

Remote Enable/Disable
Front panel Enable/Disable reset
Front panel On/Off curcuit breaker

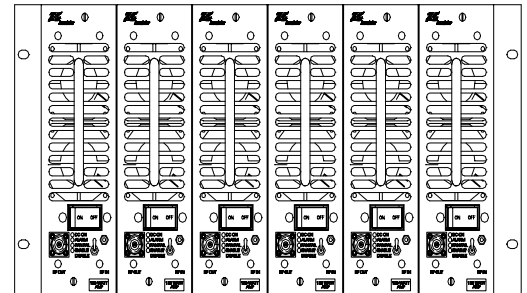
Monitor

Analog Output, proportional to output power level

Fans

Field Replaceable

All of the above specifications are subject to change without notice. AML Communications does not represent that this unit is FCC type accepted.



1000 Avenida Acaso
Camarillo, CA 93012
Phone (805) 388-1345
Fax (805) 484-2191
e-mail: sales@amlj.com

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