



Eyal MAG Ltd.

Phone: 972-9-7499100 Fax: 972-9-7493669

Kibbutz Eyal D.N. Hasharon Hatichon 45840 Israel

Web: www.eyal-mag.com Email: emi@eyal-emi.com



***24 Watt POWER AMPLIFIER
WITH ANALOG PREDISTORTION LINEARIZER
1930 to 1960 MHZ
MODEL: LPA-4047-24***

General Description of the Power Amplifier

This preliminary document specifies a 24 Watt PCS multicarrier Power Amplifier with Analog Predistortion Linearizer, Manufactured by EYAL MAG LTD,

Features:



- **1930 to 1960 MHZ**
- **50 dB Gain**
- **24 W Output Power**
- **27 V DC Voltage Range**
- **- 20°C to +80°C Operating Temperature Range**
- **Alarms and interface per custom request**

INTRODUCTION

This catalog

- Summarizes guaranteed amplifier performance specifications.
- Provides typical performance data on some of our more popular models.
- Categorizes options to our standard catalog designs.
- Provides detailed outline drawings on all catalog models.



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SPECIFICATION SUMMARY **FOR PCS POWER AMPLIFIER 4047-24**

	Specification	Note
FREQUENCY RANGE	1930÷1960 MHz	
COMPOSITE AVERAGE OUTPUT POWER	43.8dBm	(24.0W)
GAIN	50 dB	± 1 dB
GAIN FLATNESS OVER FREQUENCY	± 0.5 dB	Max.
INPUT / OUTPUT VSWR	1.5:1	Max.
DC INPUT VOLTAGE	27V dc	
DC INPUT CURRENT	10A Max.	@ Pout = 24W
ABS Power at ± 2.25MHz, 24W 3 Carriers CDMA IS-95C	-13dBm / 1MHz	+ 25°C
IMD at +/- 750 kHz offset 24W, 3 carriers CDMA IS – 95C	-45dBc / 30kHz	+ 25°C
IMD at +/- 1.98 MHz offset 24W 3 carriers CDMA IS – 95C	-60dBc / 30kHz	+ 25°C

ALARMS AND SIGNAL

ALARMS, FUNCTIONS	AUTO RECOVERY	Note
Overpower alarm at 47 dBm, 3 CDMA Carriers	Yes	
Reflected power alarm at 36-37 dBm, 3 CDMA Carriers	Yes	
Temperature Monitor, 500 mV+10mV / °C	Yes	
Over temperature alarm, 86°C	Yes	±2°C
Enable, active LOW	Yes	
Forward Power Monitor	2.4 ± 0.05V at 33dBm 4.8 ± 0.05V at 47 dBm	
Overpower shutdown	47 – 48 dBm	

PROTECTION SHUTDOWN

Internal Temperature > 85°C, auto restart at 75°C	Yes	±2°C
Overpower at 47-48 dBm enable to restart	Yes	
Over voltage 28.5V	Yes	