



Eyal MAG Ltd.

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***MULTI CARRIER POWER AMPLIFIER
FOR W-CDMA REPEATER SYSTEMS
8 W-CDMA CARRIERS
MCPA-4060RW***

Features:



- **CDMA IS-95C, 8 W-CDMA Carriers**
- **2130 to 2170 MHz**
- **60 W Output Power**
- **55 dB Gain**
- **27 V DC Voltage Range**
- **- 40°C to +85°C Operating Temperature Range**

Feedforward Technology

- **Linear Main Amplifiers Design, Utilizing LD-MOS Transistors.**
- **Optimum Error Amplifier Design for Perfect IMD Suppression.**
- **Low Loss Delay Filters.**
- **Innovative Adaptive Feedforward Correction Algorithm (Pending Patent).**
- **DSP Based Controller.**
- **Superior IMD Suppression Over The Full Operating Frequency and Temperature Range.**
- **Minimized DC Current, High Efficiency.**
- **Alarms and Indications Per Customer Request.**
- **Mechanical Design: Rack Mount and Modules**



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SPECIFICATION SUMMARY

FOR W-CDMA MCPA FOR REPEATER APPLICATIONS

MCPA-4060RW

PARAMETERS	SPEC.
FREQ. RANGE	2130-2170 MHz
OPERATING BANDWIDTH	40 MHz
GAIN	55 dB
GAIN FLATNESS	0.4 dB Over any 20 MHz
GAIN Vs TEMP.	±1.0 dB
INPUT VSWR	1.3:1
OUTPUT VSWR	1.3:1
EVM	7%
W-CDMA 8 FA	60 W
ACLR AT ±5.0 MHz P _{out} =60 W 8W-CDMA Carriers	-48 dBc Channel Integration B.W: 3.84 MHz
ACLR AT ±10.0 MHz P _{out} =60 W 8 W-CDMA Carriers	-52 dBc Channel Integration B.W: 3.84 MHz
SPECTRUM EMISSION MASK 60 W 8 CARRIER	PER 3GPP TS-25.141
±2.5 MHz	-14 dBm / 30 KHz
±3.5 MHz	-26 dBm / 30 KHz
±4.0 MHz	-26 dBm / 30 KHz
±8.0 MHz	-13 dBm / 1 MHz
SUPPLY VOLTAGE	27 V ± 1 V 24 V to 28 V With degradation of performance
SUPPLY CURRENT	27 A (P _o =60 W)
ALARMS & STATUS	SEE PAGE 4
OPERATING TEMP. RANGE	-30°C ÷ +60°C AMBIENT
STORAGE TEMP. RANGE	-40°C- +85°C
SIZE	355 x 300 x 60 mm
TYPE	ADAPTIVE FEED FORWARD

- The input signal is generated by the use of two-signal generator and a two-way combiner.
- Carrier modulation: W-CDMA per 3GPP, Chip rate: 3.84 Mbps, 64 channels.
- The ACLR measurement depends on the test set-up.
- **ACLR Measurement using 8 carriers.**
- **3GPP Spur Emission Mask using 8 carriers.**