

MODEL CMS1070M11

20 Watts

3.4 – 3.7 GHz

The Model CMS1070M11 is a 3.4 – 3.7 GHz Solid-State GaAsFET power amplifier module built for the wireless broadband network. This 43dBm linear power amplifier has a minimum gain of 20 dB and is designed to meet the WiMAX (802.16) specifications. It can be modified to meet various types of OFDM or NPR requirements. The module comprises a printed wiring assembly housed in a machined aluminum enclosure. Cooling requirements are defined by the over-temperature shutdown limits listed below.

The amplifier is protected from thermal overload, over power, over voltage or wrong voltage polarity as well as having an internal isolator.

SPECIFICATIONS

FREQUENCY RANGE.....	3.4 – 3.7 GHz
GAIN	20 dB minimum
GAIN FLATNESS	± 1.2dB over 200 MHz
GAIN VARIATION OVER TEMPERATURE	± 1.5dB minimum
OPERATION TEMPERATURE	0 – 60 Deg C
P1 dB	43 dBm minimum
OVER-POWER SHUTDOWN	44dBm ± 0.5dBm
IP3 @ 33dBm OUTPUT POWER (30dBm/TONE).....	54dBm minimum
INTER-MODULATION DISTORTION.....	1.5% EVM or –36 RCE for IEEE806-16-2004 WiMAX at 33dBm average output power
INPUT/OUTPUT IMPEDANCE.....	50 Ohms
OUTPUT ISOLATION	Built in Isolator
HARMONIC DISTORTION	Better than –60dB @ 33dBm
OUTPUT RETURN LOSS	> 15dB
POWER SUPPLY	12 Vdc
DC CURRENT.....	10A maximum
RF CONNECTORS	SMA Female
DC CONNECTOR	D-Sub Combo 7W2
.....	(Mating connector supplied)
MECHANICAL DIMENSIONS (L X W X H).....	6" X 3" X 2.5" (Including heatsink)

FUNCTIONS

TEMPERATURE SHUTDOWN	Mute @ ≥ 55 ± 5 Deg. C (Restart @ 45 Deg. C ± 5 Deg. C)
OVER-TEMPERATURE ALARM (PIN 3).....	≥ 50 Deg. C = TTL High
POWER AMP DISABLE (PIN 1)	Ground
INTERFACE GROUNDING PIN	PIN 5

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