

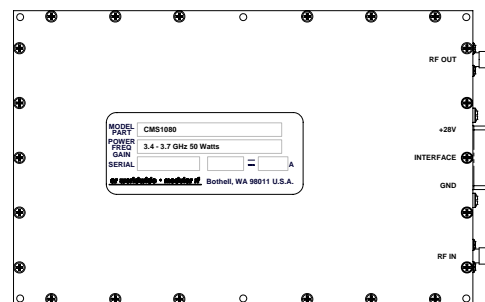
MODEL CMS2010
50 Watts
2.5 – 2.7 GHz

The Model CMS2010 is a 2.5 –2.7 GHz Solid-State latest generation LDMOS power amplifier module built for the wireless broadband network. This 50dBm linear power amplifier has a scalable gain of 20 to 50dB 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.....	2.5 – 2.7 GHz
GAIN	45 dB minimum
GAIN FLATNESS	± 1dB over 200 MHz
GAIN VARIATION OVER TEMPERATURE	± 1.5dB minimum
OPERATION TEMPERATURE	0 – 60 Deg C
P1 dB	47 dBm minimum
OVER-POWER SHUTDOWN.....	48 dBm (Scalable)
IP3 @ 33dBm OUTPUT POWER (30dBm/TONE).....	54 dBm minimum
INTER-MODULATION DISTORTION.....	2% EVM or –34 RCE for 64 QAM symbols at 6 Watts average output power (IEEE 802.16)
INPUT/OUTPUT IMPEDANCE.....	50 Ohms
OUTPUT ISOLATION	Built in Isolator
HARMONIC DISTORTION	Better than –60dB @ 38dBm
RETURN LOSS (INPUT/OUTPUT PORTS).....	15dB
POWER SUPPLY	28 Vdc
DC CURRENT.....	4 A maximum
RF CONNECTORS	SMA Female
DC CONNECTOR	D-Sub Combo 7W2
.....	(Mating connector supplied)
MECHANICAL DIMENSIONS (L X W X H).....	7" X 4.5" X 1." (Excluding heatsink)



FUNCTIONS

TEMPERATURE SHUTDOWN	Mute @ 60 ± 5 Deg. C (Auto restart @ 45 ± 5 Deg. C)
OVER-TEMPERATURE ALARM (PIN 3).....	≥ 50 Deg. C = TTL High
RF ENABLE/DISABLE (PIN 4).....	5V = ON 0V = OFF
RF FORWARD POWER MONITOR (PIN 2).....	2V @ 38 dBm (Adjustable)
POWER AMP DISABLE (PIN 1)	Ground
INTERFACE GROUNDING PIN	PIN 5

Other interface options are available on demand.

DOC # 7-98-XXX-XXX
 REV -