

## MODEL CMS1070

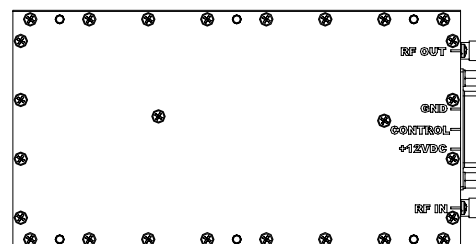
**20 Watts**

**3.4 – 3.7 GHz**

The Model CMS1070 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 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.....	3.4 – 3.7 GHz
GAIN .....	45 dB minimum
GAIN FLATNESS .....	± 1.2dB over 200 MHz
GAIN VARIATION OVER TEMPERATURE .....	± 1.5dB minimum
OPERATION TEMPERATURE .....	0 – 60 Deg C
P1 dB .....	20 Watts minimum
OVER-POWER SHUTDOWN .....	44dBm
IP3 @ 33dBm OUTPUT POWER (30dBm/TONE).....	54dBm minimum
INTER-MODULATION DISTORTION.....	2% EVM or –34 RCE for 64 QAM symbols at 3Watts average output power (IEEE 802.16)
INPUT/OUTPUT IMPEDANCE.....	50 Ohms
OUTPUT ISOLATION .....	Built in Isolator
HARMONIC DISTORTION .....	Better than –60dB @ 35dBm
RETURN LOSS (INPUT/OUTPUT PORTS).....	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 1" in. (15.24 X 7.62 X 2.54 cm) (Excluding heatsink)



### FUNCTIONS

TEMPERATURE SHUTDOWN .....	Mute @ 55 ± 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 MONITOR (PIN 2).....	1.5V @ 35dBm (Adjustable)
POWER AMP DISABLE (PIN 1) .....	Ground
INTERFACE GROUNDING PIN .....	PIN 5

### MODEL CONFIGURATIONS

MODEL NUMBER	PART NUMBER	HEATSINK	SIZE (LxWxD)
CMS1070	1-60-895-002	NO	6" X 3" X 1" in. (15.24 X 7.62 X 2.54 cm)
CMS1070	1-60-895-001	YES	6" X 3" X 2.5" in. (15.24 X 7.62 X 6.35 cm)

DOC # 7-98-895-001 REV D
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