

## CM600 SERIES Single Output

- **■** Cheapernet Application
- 9 Volt DC Output Up to 250 mA
- Full Power to +71°C
- Standard 24 Pin DIP Package
- Optional Pi Input Filter
- 5 or 12 VDC Input

The CM 600 Series of low cost, highly reliable DC/DC Converters is intended to power transciever chips for Cheapernet local area networking. This series provides —9 VDC in a compact 24-Pin DIP Package. These units are ideally suited for high density PC board applications where space is at a premium. The CM600 Series is available with internal Pi type filter or capacitor input filter as indicated in the description table. This series offers both regulated and unregulated outputs.

The CM 600 Series can accommodate either a 5 VDC or 12 VDC input voltage. The units provide full power up to +71°C. The input/output isolation is 500 VAC RMS minimum. This is a requirement for Cheapernet local area networking applications.



(305) 974-2442

## T-57-11

SPECIFICATIONS	SP	<b>FCI</b>	FIC	ΔTI	ON	IS
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All Specifications Typical at Nominal Line, Full Load and 25°C Unless Otherwise Noted.

OUTPUT SPECIF	CICATIONS 9 VDC
Voltage Accuracy	±5%
Ripple and Noise	, 20 MHz BW 100 mV P-P
Short Circuit Prot	
CM621, 621 All Other Mo	D, 622, 622D Momentary dels Power Foldback
INPUT SPECIFIC	ATIONS
Input Voltage	5 or 12 VDC
Input Voltage Rai	nge ±10%
GENERAL SPEC	IFICATIONS
Efficiency Regulated M	odels 50%
Unregulated	Models
Switching Freque	ency 35-60 kHz
Isolation Voltage.	500 VAC RMS, min.
ENVIRONMENTA	L SPECIFICATIONS
Operating Tempe	rature Range
CM621, 6211	D, 622, 622D 0°C to +71°C
	dels25°C to +71°C
Storage Tempera	None ture Range40°C to +85°C
Cooling	Free Air Convection
DUVO(0.41, 0.05.0	IEIO A TIONIO
PHYSICAL SPEC Weight	IFICATIONS 0.5 oz (14 g.) Non-Conductive Black Material
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TWO-YEAR WARRANTY

## 1 to 2 Watt LAN DC/DC Converters



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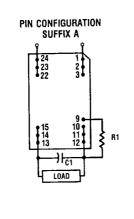
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INPUT	OUTPUT	OUTPUT	INPUT (	CURRENT	INPUT	REFLECTED	REGUL	ATION	PIN		MODEL
VOLTAGE	VOLTAGE	CURRENT	NO LOAD	FULL LOAD	FILTER	CURRENT	LINE	LOAD	CONF.	CASE	NUMBER
REGULATED											
5 VDC	9 VDC	140 mA	120 mA	540 mA	Pi	120 mA	±0.4%	$\pm 0.4\%^{2}$	Α	F	CM601
5 VDC	9 VDC	140 mA	120 mA	540 mA	CAP	2500 mA	±0.4%	$\pm 0.4\%^{2}$	Α	F	CM602
12 VDC	9 VDC	140 mA	45 mA	215 mA	Pi	120 mA		$\pm 0.4\%^{2}$		F	CM603
12 VDC 12 VDC	9 VDC	140 mA	45 mA	215 mA	CAP	1250 mA		$\pm 0.4\%^{2}$		F	CM604
UNREGULATED											
5 VDC	9 VDC	145 mA	110 mA	415 mA	Pi	90 mA	1.2%1	6.0% <sup>3</sup>	B,D <sup>4</sup>	F	CM611
5 VDC	9 VDC	145 mA	110 mA	415 mA	CAP	2000 mA	1.2%	6.0%3	B,D <sup>4</sup>	F	CM612
5 VDC	9 VDC	250 mA	150 mA	725 mA	CAP	3000 mA	1.2%	6.0% <sup>3</sup>	C,D <sup>4</sup>	F	CM621
12 VDC	9 VDC	145 mA	40 mA	165 mA	Pi	90 mA	1.2%	5.0% <sup>3</sup>	B,D <sup>4</sup>	F	CM613
12 VDC	9 VDC	145 mA	40 mA	165 mA	CAP	1000 mA	1.2%	5.0% <sup>3</sup>	B,D⁴	F	CM614
12 VDC	9 VDC	250 mA	55 mA	290 mA	CAP	1500 mA	1.2% <sup>1</sup>	5.0% <sup>3</sup>	C,D <sup>4</sup>	F	CM622

NOTES: 1. Per 1% change to Input Voltage.

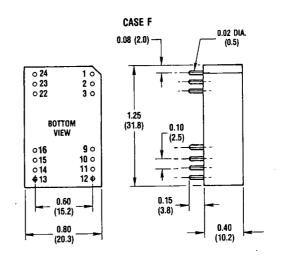
2. For a Load change from 60 mA to 140 mA.

3. For a Load change from 100% Full Load to 20% Full Load.

4. For "D" Pin Configuration option, add suffix letter "D" to model number, i.e., CM622D.







Pin Connections						
Pin	Α	В	С	D		
1 2 3	+V Input +V Input +V Input	+V Input +V Input +V Input	+V Input NC NC	+V Input +V Input NC		
9 10 11 12	Resistor* +V Output +V Output +V Output	+V Output +V Output +V Output +V Output	No Pin  -V Output  +V Output  -V input	-V Output -V Output +V Output +V Output		
13 14 15 16	-V Output -V Output -V Output No Pin	-V Output -V Output -V Output No Pin	-V Input +V Output -V Output NC	NC NC NO Pin		
22 23 24	-V Input -V Input -V Input	-V Input -V Input -V Input	NC NC +V Input	NC -V Input -V Input		

\*External Resistor R1. C1 =  $10.0~\mu$ F, 25V Tantalum Capacitor R1 = 1000  $\mu$ F, 25V Tantalum Capacitor R1 = 1000 C1 Will improve output noise performance. It is not required for converter operation. Regulated units only (CM601, 602, 603 & 604), Pin 9 provides a preregulated output voltage, which when used as shown above provides for a full load output current of 140 mA. When load current is less than 60 mA output voltage will rise and for a no load condition it can rise to approximately 13 volts.