

UM600 SERIES

15 Watt DC-DC Converters

- 2:1 Input Range.
- 15W Isolated Output.
- Efficiency to 84%.
- Remote On/Off Control
- 100 KHz Switching Frequency.
- Six-Sided Shield.

SPECIFICATIONS

All specifications are typical at nominal line, full load and 25°C unless otherwise noted.

INPUT SPECIFICATIONS

Input Voltage Range, 12V 9-18V
24V 18-36V
48V 36-72V
Input Filter Pi Network
Reverse Voltage Protection¹ Internal Shunt Diode
Use External Fuse

OUTPUT SPECIFICATIONS

Voltage Accuracy, Single Output ±1% max.
Dual +Output ±1% max.
-Output ±3% max.
Triple, 5V ±2% max.
12V/15V ±3% max.
Voltage Balance, Dual Output at Full Load ±1.0% max.
Transient Response
Single, 25% Step Load Change <500 μ sec.
Dual, FL-1/2FL, ±1% Error Band <500 μ sec.
External Trim Adj. Range ±10%
Ripple and Noise, 20MHz BW 10mV RMS max.
75mV P-P max.
Temperature Coefficient ±0.02%/°C max.
Short Circuit Protection Continuous
Overvoltage Protection, 5V 6.8V
12V 15V
15V 18V
Line Regulation², Single/Dual Output ±0.2% max.
Triple Output ±1% max.
Load Regulation³, Single/Dual Output ±1% max.
Triple Output ±5% max.

GENERAL SPECIFICATIONS

Efficiency See Table
Isolation Voltage 500 VDC min.
Isolation Resistance 10^8 ohms min.
Switching Frequency 100KHz
Case Grounding Capacity Coupled to Input
Operating Temperature Range
Ambient, None Derating -25°C to +71°C
Cooling Free Air Convection
Storage Temperature Range -55°C to +105°C
EMI/RFI Six-Sided Continuous Shield
Dimensions 2.56 * 3.0 * 0.83 inches
(65 * 76.2 * 21.1mm)
Case Material Black-Coated Copper with
Non-Conductive Base
Weight 180g

NOTES:

1. Determine the correct fuse size by calculating the maximum DC current drain at low line input, maximum load and then adding 20% to 25% to get the desired fuse size.
2. Measured from high line to low line.
3. Measured from full load to 1/4 full load.

REMOTE ON/OFF CONTROL

Logic Compatibility.....	CMOS or Open Collector TTL
Ec-ON,.....	>+5.5 VDC or Open Circuit
Ec-OFF,.....	<1.8VDC
Shutdown Idle Current.....	10mA
Control Common.....	Referenced to Input Minus

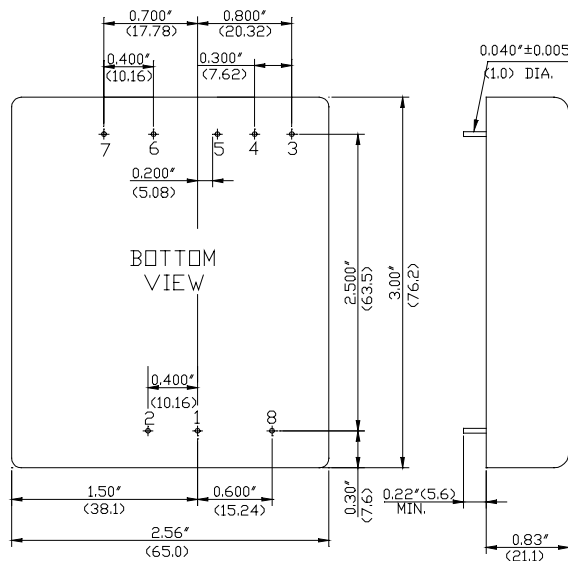


**UNIVERSAL
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MODEL NUMBER	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT	INPUT CURRENT		% EFF	CASE
				NO LOAD	FULL LOAD		
UM601	12 VDC	5 VDC	3000 mA	30 mA	1700 mA	75	E
UM602		12 VDC	1250 mA	30 mA	1600 mA	78	
UM603		15 VDC	1000 mA	30 mA	1600 mA	78	
UM604		±12 VDC	±625 mA	35 mA	1520 mA	82	
UM605		±15 VDC	±500 mA	35 mA	1520 mA	82	
UM606		5/±12 VDC	1500/±310 mA	40 mA	1600 mA	78	
UM607		5/±15 VDC	1500/±250 mA	40 mA	1600 mA	78	
UM608		+5/+12/-5 VDC	1500/+310/500 mA	40 mA	1470 mA	78	
UM611	24 VDC	5 VDC	3000 mA	20 mA	810 mA	77	E
UM612		12 VDC	1250 mA	20 mA	780 mA	80	
UM613		15 VDC	1000 mA	20 mA	780 mA	80	
UM614		±12 VDC	±625 mA	30 mA	750 mA	84	
UM615		±15 VDC	±500 mA	30 mA	750 mA	84	
UM616		5/±12 VDC	1500/±310 mA	30 mA	780 mA	80	
UM617		5/±15 VDC	1500/±250 mA	30 mA	780 mA	80	
UM618		+5/+12/-5 VDC	1500/+310/500 mA	30 mA	815 mA	80	
UM621	48 VDC	5 VDC	3000 mA	20 mA	410 mA	77	E
UM622		12 VDC	1250 mA	20 mA	390 mA	80	
UM623		15 VDC	1000 mA	20 mA	390 mA	80	
UM624		±12 VDC	±625 mA	25 mA	375 mA	84	
UM625		±15 VDC	±500 mA	25 mA	375 mA	84	
UM626		5/±12 VDC	1500/±310 mA	20 mA	380 mA	82	
UM627		5/±15 VDC	1500/±250 mA	20 mA	380 mA	82	
UM628		+5/+12/-5 VDC	1500/+310/500 mA	20 mA	350 mA	82	

CASE E



All dimensions in inches(mm).

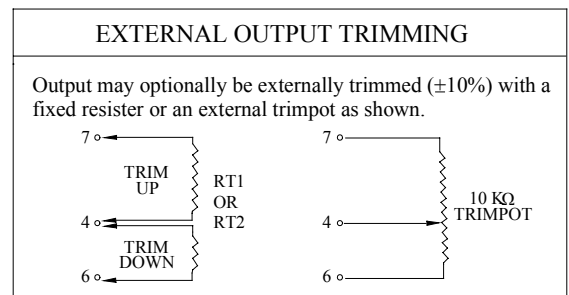
Tolerance .xx =±0.04

.xxx=±0.010

NOTES:

- Maximum total power from all outputs is limited to 15 watts but no output should be allowed to exceed its maximum current.
- Minimum current on each output is required to maintain specified regulation.

PIN CONNECTIONS			
Pin	Single	Dual	Triple
1	+Input	+Input	+Input
2	-Input	-Input	-Input
3	No Pin	+Output	+Output
4	Output Trim	Common	Common
5	No Pin	-Output	-Output
6	+Output	No Pin	+5V Output
7	-Output	No Pin	No Pin
8	Remote On/Off Control		



TRIPLE OUTPUT LOADING TABLE ¹				
		Amperes		
		Min ²	Nom.	Max.
1	+5	.250	1.5	2.0
2 & 3	+12 or -12	.100	.310	.500
2 & 3	+15 or -15	.100	.250	.500
2 & 3	+12 or -5	.100/.100	.310/.500	.500/.500



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