



AM Power Systems

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CYCLONE Series

ULTRA-LOW Power DC-DC Converter w/Variable Input (3-5V) and w/Dual HI-Voltage Outputs

AM60v120-CM - Vout1 of -600V (Vin variable) and Vout2 of +1.2KV (fixed)

AM60v120-RCM - Vout1 of -600V (w/Control Pin#2 adjustment) and Vout2 of +1.2KV (fixed)

The **AM60v120-CM** and **AM60v120-RCM** are ultra-low power, multiple output, high voltage DC-DC converters with the input voltage (Vin) range being 3.0 to 5.0 volts and the two output voltages (Vout) being -600V and +1,200V. Applications include photo-multiplier applications as with radiation detection, industrial control verification, medical imaging or other Homeland Security detection equipment. With the latest in PWM integrated circuit (IC) design, these high efficiency parts have an output ripple less than 1%.

SPECIFICATIONS:

Internal regulation with solid-state PWM design and with the capability of output voltage setting by an external control voltage feature

Input voltage (Vin): $V_{in} \geq +3.0V \leq +5V$

Multiple Output voltages (Vouts 1 & 2):

V out1 (+/-25% variable) -600V (negative)

Vout2 (isolated and fixed) +1200V (positive)

w/±10% Vout tolerance at nominal input voltage

Output voltage (Vout1) adjustment range: ±25% w/Vin adj. or separate control pin #2 (-400V to -800V)

Maximum load/output current: 100uA for -600V and 1uA for 1.2KV

Maximum input current: 27mA at 5V input voltage and max load

Maximum power consumption: 0.15W at max load of 10 Mohm resistance.

Maximum "no load" power consumption: 0.03W.

Vout1 (-600Vout#1) stability over temperature: +/- 3%

Capability of auto thermal and over-voltage shutdown included

Min Efficiency: 40% with maximum load.

Output voltage ripple: ±1% max. V out

Regulation: referenced to -600V output (V out#1)

OTHER CONSIDERATIONS:

Max Size: (37x37x13)mm ±2mm.

EMI shielding: optional w/metal can/cover

Environmental Temperature range: -10C +50C

PCB mount: Thru-hole (Suffix - T)

PRICE & DELIVERY:

Delivery from stock for small quantities (<10 units)

Pricing at the 2-4 pc. level is \$289.00 each

5-9 unit pricing is \$259.00 each

10-19 units - \$229.50 each.

20-25 units - \$199 each.

Higher Volumes - contact factory

NRE FEES FOR CUSTOM DESIGN (customer application specific Vout req'ts)

Up-front fees - \$3,750.00 payable 2/3 at time of order placement, balance on delivery of samples

First delivery of 2-9 units in 3-4 weeks after P.O. placement

Delivery up to 10-25 units in 2-3 weeks after first delivery.