



# Modular Block (MB5) Series Up To 30 Watts, Triple Output

*The Power Professionals*

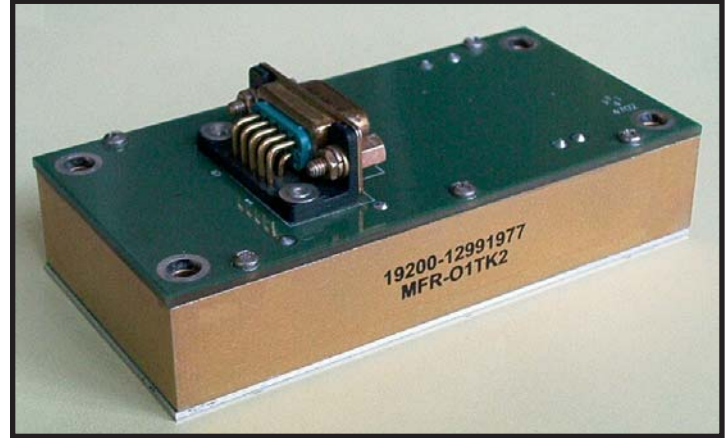
*Power Conversion Products*



## Features

- MIL-STD-1275 compliant
- Meets MIL-STD-461D requirements
- Designed for combat vehicles
- Fixed frequency
- Meets nuclear hardening requirements

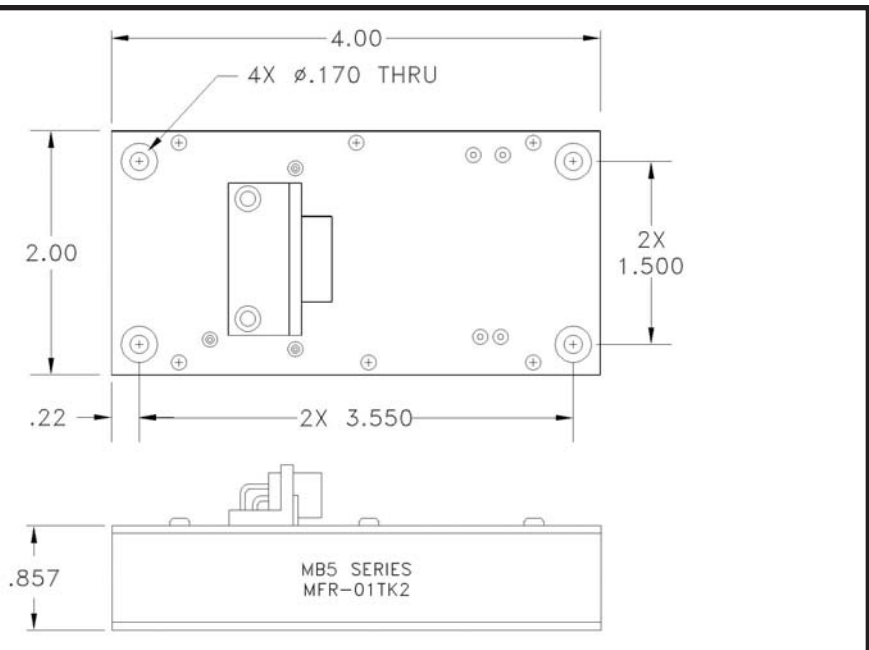
The Modular Block (MB5) Series of triple output DC/DC converters are designed for demanding military and aerospace applications. The DC/DC converters come in two configurations, PC board mounted or 'D' Sub Connector configuration. These converters are designed for demanding ground vehicle applications and meet MIL-STD-1275 requirements as well as being able to withstand nuclear environments and operation to +100°C. The converters are a fixed frequency technology and are designed with high reliability in mind.



## Mechanical Drawing



Prime Power reserves the right to change design and specifications at any time without prior notice. It is Prime Power's policy to improve product as new technologies and components become available.



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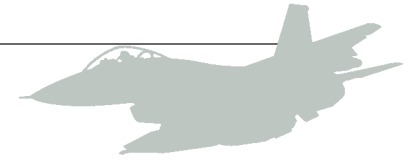
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# Modular Block (MB5) Series Up To 30 Watts, Triple Output

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*Power  
Conversion  
Products*



## Features

- Wide input range 16-40 Vdc
- Operates -46°C to +100°C
- Ruggedized for MIL-STD-810 requirements
- Over current and voltage protection
- Custom configurations upon request

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## Technical Data

### Input Characteristics

Voltage: 28 Vdc nominal  
16 Vdc - 40 Vdc  
MIL-STD--1275, 6 Vdc cranking  
requirement at reduced output loads.  
Voltage spike to  $\pm 250$  Vdc

### Isolation

Input/Output Isolation: 100 Vdc  
Line to Case Isolation: 50 Vdc

### Output Characteristics (Typical)

Set Point Accuracy:  $\pm 1\%$ , no load  
Load Regulation: .02%  
Line Regulation: .02%  
Ripple: 1%  
OVP: non-shutdown, auto recovery  
Current Limit: auto recovery, fold  
back  
Start Up Time:  $\leq 20$ ms  
Start Up Over Shoot:  $\leq 0.5$ V

### Environmental

Temperature: -46 to +100°C,  
Baseplate; -51 to  
+100°C, Storage  
Functional  
Shock: 40g for 11ms and 18  
half-sine shock pulses  
Vibration: Sine 5g at 15 to  
2000Hz. Random 0.1  
g<sup>2</sup>/Hz  
E.M.I.: MIL-STD-461D, CE102-1, 28  
volt basic curve. CS101,  
CS114, CS115, RE102-3  
Nuclear Hardening: Consult  
Factory

## Model Specifications

### Triple Outputs (non-standards upon request)

Part no.	Output 1	Output 2	Output 3
MB5-30/M4	5V/3A	15V/0.5A	15V/0.5A
MB5-30/M3	5V/3A	12V/0.6A	12V/0.6A

### Mechanical

Weight: 9 oz.  
Size: 4 x 2 x 1

(Dimensions are in inches)



## Ordering Information

\*For 'D' connector option add "D" to the end of the part number.