

Battery Equalizer (M5512)



Designed from the ground up to meet the demanding MIL standards required for Ground Vehicles, the M5512 Battery Equalizer allows users to tap the 12VDC center point to supply 12VDC Loads without degrading the vehicle's batteries or interfering with proper charging.

About Milpower Source

A global leader in the design and manufacture of standard and customized power products for military applications.

Our COTS (Commercial Off-the-Shelf) and MOTS (Modified Off-the-Shelf) power conversion products set the industry standard.

Experience

Milpower Source has been designing power solutions for over 30 years. Partner with us to develop the optimal solution the first time.

Versatility

Milpower Source's wide range of power solutions are incorporated into the following military applications: Avionics, UAV's, Aircraft, C4ISR, Electronic Warfare, Ground Vehicles, Radar Arrays, Missiles, Surface Ships, Submarines and more.

For more information on any of our power products, including: UPS, VPX /VME, Power Conversion and more please visit www.milpower.com

Engineered Exclusively for Military Ground Applications

- **Battery Voltage**
Initial design achieves full compliance with MIL-STD-1275A/B/C/D/E
- **EMI**
Initial design achieves full compliance with MIL-STD-461F
- **In-field Ease of Use**
Smart visual balancing indicators
- **Higher Temperature Tolerance**
Ensures reliable operations, especially when installed in an engine compartment
- **Environmentally Sealed Enclosure**
Withstands high-pressure wash-down, rain, sand, dust, humidity and salt-fog



Support

Our engineers are ready to answer your questions, help with product selection, provide product support and discuss technical issues. We have the team and experience to develop the power solutions that satisfy your exacting application needs.

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Specifications and Comparison

Compare our Battery Equalizer, designed with military applications in mind, to the competition's ruggedized commercial product.



Battery Equalizers Specifications Comparison Chart

Characteristic	Competitor's 100Amp Equalizer		
Battery Voltage	SAE J1455 Rev A	Full Compliance with MIL-STD-1275A/B/C/D/E	Designed with military applications in mind to meet MIL Standards. Achieves reduced incompatibility and wash out during compliance testing.
EMI	SAE Standard J1113-41 Class 2 and ECR R 10.2 (E mark)	Full compliance with MIL-STD-461F	
Operating Temperature	-40°C to +85°C	-40°C to +100°C	A wider operating temperature range for increased reliability when installed in the challenging environment of a military vehicle engine compartment.
Non-operating Temperature	-40°C to +105°C	-54°C to +110°C	
Operational Shock	30g/11mS	40g/11mS	Higher field reliability, from an increased operation range, ensures a lower Life Cycle Cost.
Vibration	0.0635 g ² /Hz, 5 to 100Hz 3dB per Octave roll-off to 500Hz. (3.89grms)	0.16 g ² /Hz, 10 to 200Hz, 3dB per Octave roll-off to 2KHz (10.2grms). And, MIL-STD-810F Method 514.6 Proc I, Figure C-3 (Composite wheeled vehicle vibration)	
Visual Indications	None	Smart Green/Red LEDs provide visual indication of balancing current level, balancing status and faults indications.	Provides at-a-glance inspection for in-field readiness review. Results in increased ease of use and confidence in the product.
Power Dissipation at 24VDC and 100Amp	110 W Typical	57 W Maximum	Low dissipation for reduced stress and longer battery life.
Max Current @ 71°C amb.	82Amp	100 Amp	Allows instillation and reliable operations at high temperatures, especially when installed in engine compartments.
Max Current @ 86°C amb.	0	50 Amp	
Max Current @ 90°C amb.	0	37 Amp	
Max Current @ 94°C amb	0	24 Amp	
Equalizing Accuracy (of V ₂₄ /2)	±1%	±0.5%	More efficient charging and longer battery life.
Reverse Polarity Protection	-26V	-36V	Higher tolerance to instillation challenges.
Quiescent Current 24V terminal	25mA (max)	4mA (max)	Lower current prevents battery drain when the vehicle is not in use.
Quiescent Current 12V terminal	Not specified	1mA (max)	
Thermal Shocks	-40°C to +85°C 36 Cycles	-40°C to +85°C 500 Cycles	Increased cycles reduce operational wear.