

# END IDLING IN YOUR FLEET

ENGINES CAN'T POLLUTE AT **ZERORPM**<sup>®</sup>  
IDLE MITIGATION SYSTEMS<sup>®</sup>

## AC 100.100-24

The AC 100.100-24 is a Lithium-Iron\* powered A/C unit. This unit is utilized to provide operators with engine-off A/C. Not only does this product offer improved comfort, but it reduces the need to run the vehicle's engine to power the A/C system. This translates to reduced operating cost for your fleet and protects the environment.

This unit can be charged using 12V power from an alternator, solar panel, or the internal 110V charger.

**Note:** This product requires other ZeroRPM IMS components. Reference [ZeroRPM.com/systems](http://ZeroRPM.com/systems) for more information.

*\*"Lithium-Iron" is marketing term for ZeroRPM's LiFeMnPO4 packaged energy storage systems.*

## SYSTEM BENEFITS:

- IMPROVE OPERATOR SAFETY
- ENGINE-OFF AIR CONDITIONING
- REDUCE OPERATING COST
- PROTECT THE ENVIRONMENT
- LIGHT WEIGHT
- SMALL FORM FACTOR

## SPECIFICATIONS:

Cooling Capacity	~11, 800 BTU (at target evaporator and condenser temp.)
Total Energy	3.8 kWh
Usable Energy	3.04 kWh
Current Limit Export Primary	285A @ 100% Duty Cycle @12V
Current Limit Export Auxiliary	285A @ 100% Duty Cycle @ 24V
Output Voltage Primary	12V-14.1V
Output Voltage Auxiliary	24V-28.2V
Charge Voltage	12V-14.2V
Nominal Voltage Primary	12.8V
Nominal Voltage Auxiliary	25.6V
Battery Chemistry	Lithium Iron (LiFeMnPO4)
Number of 12V Battery Packs	3
Internal Fuse Rating Battery Protection (Slow Blow)	350A
Product Housing Material	Powder Coated Galvanized Steel with Aluminum lid
Weight	194.0 lbs / 88 kg
Charging Temperature Range*	32°F to 140°F / 0°C to 60°C
Discharge Temperature Range*	-4°F to 150°F / -20°C to 65.6°C
A/C Fitting Sizes	#8 Pressure / # 10 Suction
Compatible Freon Types	R-1234YF or R134a

\*Temperatures are based on software versions 4.94.00 and later with battery SOC of >40%.



**Ask for ZeroRPM<sup>®</sup> Idle Mitigation Systems<sup>®</sup> WHERE you purchase your fleet vehicles!**

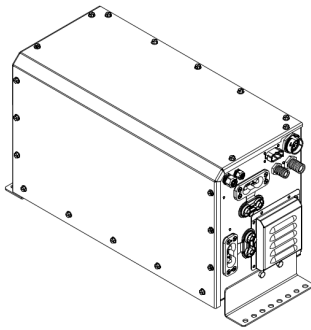
# END IDLING IN YOUR FLEET

AC 100.100-24

**ALL DIMENSIONS  
ARE IN INCHES**

**FOR WIRING OF THE  
SYSTEM PLEASE  
REFERENCE THE  
SYSTEM SCHEMATIC**

**4-6" CLEARANCE  
NEEDED FOR  
CONNECTIONS**

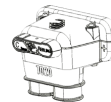


## SIGNAL CONNECTIONS

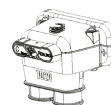


**21 PIN  
PRIMARY  
SIGNAL  
CONNECTOR**

## POWER CONNECTIONS

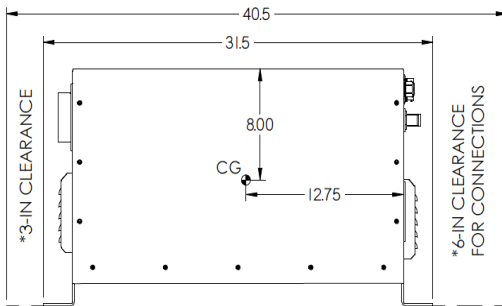


**24V POWER  
2-CABLE  
REBLING  
CONNECTOR**

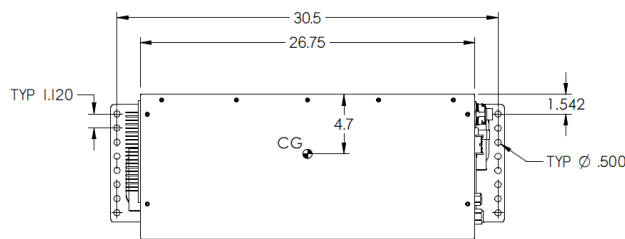


**12V POWER  
2-CABLE  
REBLING  
CONNECTOR**

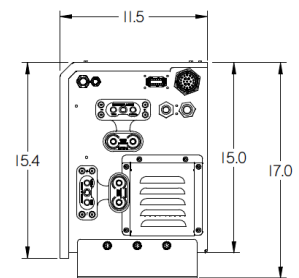
### FRONT



### TOP



### SIDE



## PRODUCT NOTES:

- Storage temperature: -4 °F to 149 °F / -20 °C to 65 °C.
- The unit must be mounted securely and upright.
- In shipping or storage, do not stack more than one product on top of one another (i.e. two unit stack maximum).
- The unit must be mounted so the lid is removable.
- The unit must be mounted as closely to the loads and supply as possible.
- If the unit has been in storage for more than 90 days, the voltage must be checked to ensure that the batteries have not discharged past the acceptable threshold.
- There must be adequate provisions for drainage below the unit to prevent flooding.
- There must be at least 6" of clearance on the right side of the unit for the main power connectors and/or A/C lines.
- Wash-down requirements: Do not pressure-wash the unit below 10° (horizontal) into the vents. Do not pressure-wash any closer than 12" from the unit.
- The A/C lines must not be left uncapped longer than 15 minutes.
- The unit must be mounted either in open air or in a well-ventilated compartment. In extreme hot or cold environments, it is ideal to mount the unit in a temperature controlled compartment.
- The unit can operate up to a 45° angle from vertical orientation.
- The unit must be mounted with vibration-dampening material. The material must be installed between the unit's feet and the mounting surface.
- Exporting at maximum current for an extended amount of time will substantially reduce the life of the battery pack.
- To ensure proper air flow, the filter on the unit should be cleaned every 6 months in external or unfiltered environments. Filter should be cleaned annually, or as specified by internal procedures, if in a filtered environment.
- Do not run the IMS without charging the A/C system.
- Do not put the unit on its side or upside down without written approval from ZeroRPM.
- Do not extend the current shunt wires (if current shunt wires are present).
- Excessive oil in the A/C circuit could harm the A/C system and reduce performance.
- Use only PVE oil in the A/C circuit of the system.