

# END IDLING IN YOUR FLEET



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

## EM 200-12 IC

The EM 200-12 IC is an all-in-one Idle Mitigation System which provides 2 kWh of usable energy. The unit not only supplies power to connected accessories while the engine is off, but it also manages the start/stop functionality of your vehicle. This reduces the need to idle the engine in order to power accessory loads, which in turn reduces both operating costs and CO<sub>2</sub> emissions. Pairing the unit with a ZeroRPM A/C unit enables engine-off air conditioning; it can also provide engine-off heat when used in conjunction with an accessory heater. The EM 200-IC uses lightweight lithium-iron batteries. This chemistry makes our battery technology among the safest on the market. The unit features quick disconnects which isolate power to the unit in an emergency. This unit can be charged using the 12V power from an alternator or solar panels.

**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:

Total Energy	2.5 kWh
Usable Energy	2.0 kWh
Continuous Power	5kWh
Current Limit Export	350A
Output Voltage	12V-14.1V
Charge Voltage	12V-14.7V
Nominal Voltage	12.8V
Battery Chemistry	*Lithium-Iron (LiFeMnPO4)
Internal Fuse Rating (Slow-blow)	350A
Product Housing Material	Powder-coated Aluminum
Weight	~80lbs/ ~36.3kg
Charge Temp. Range*	32°F to 140°F / 0°C to 60°C
Discharge Temp. Range*	-4°F to 150°F / -20°C to 65.6°C

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



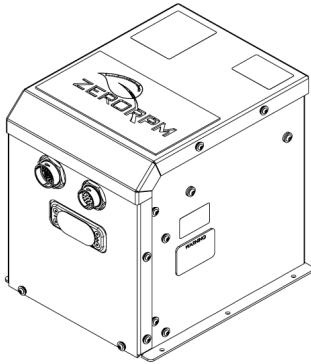
**Ask for ZeroRPM<sup>®</sup> Idle Mitigation Systems<sup>®</sup> WHERE you purchase your fleet vehicles**

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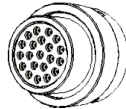


## EM 200-12 IC

**ALL DIMENSIONS  
ARE IN INCHES**



### SIGNAL CONNECTIONS



**21 PIN  
PRODUCT  
INTERFACE  
CONNECTOR**



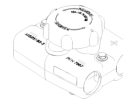
**47 PIN  
PRODUCT  
INTERFACE  
CONNECTOR**

### POWER CONNECTIONS

PICK A 2-CABLE OR A 4-CABLE  
CONNECTOR FOR YOUR APPLICATION.



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

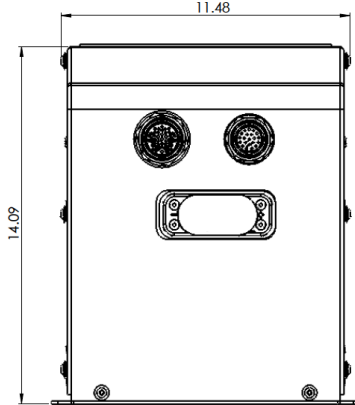


**12V POWER  
4-CABLE  
REBLING  
CONNECTOR**

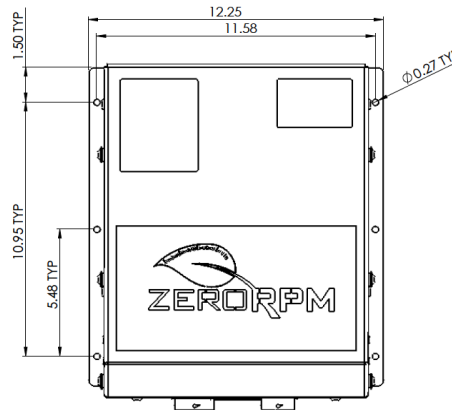
**FOR WIRING OF THE  
SYSTEM PLEASE  
REFERENCE THE  
SYSTEM SCHEMATIC**

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

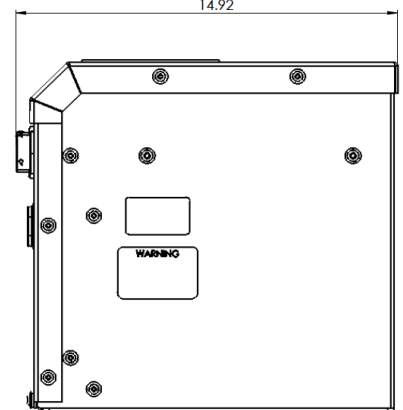
### FRONT



### 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.
- 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 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 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).