## Smart Energy Management System - 50 Amp with inverter panel

Intellitec's Smart Energy Management System - 50 Amp (Smart EMS) is designed to be used in RVs equipped with 50 Amp electrical service. The System senses when the coach is connected to a 50 Amp service, or operating from the generator and allows simultaneous operation of all the 120 volt loads. When 50 Amp service is not available and the coach is connected to a smaller electrical service, such as 30 or 20 Amp, the system automatically takes control of the loads to practically eliminate circuit breaker tripping. It constantly monitors the total amount of current drawn in the RV and controls the loads, as necessary, to keep the total current to a value less than, or equal to, the available power service.

There is no programming necessary and the unit will work with any load within the circuit breaker limits. The Smart EMS automatically "learns" the amount of current drawn by each of the controlled loads as it turns them on and off. In this way, it automatically adapts to differing loads, or loads whose current changes with line voltage or temperature.

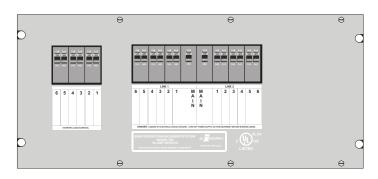
## Features:

- Inverter subpanel circuit breakers.
- Minimizes circuit breaker tripping when connected to 20, or 30 Amp service.
- Eliminates manual appliance select switches.
- · Senses current of owner added loads.
- Owner selectable 20 Amp operation (from optional remote panel).
- Protects air conditioners with two minute restart delay.
- "Learns" controlled appliance current draw.
- Optional remote panel with Load Status indicators and a digital AC line amp meter.

## **SMART EMS OPERATION**

In larger RV's, equipped with 50 Amp electrical service, over-load is typically not a problem. However, 50 Amp service is often not available at camp sites. It is then that an energy management system is needed. The Smart EMS controls certain electrical loads to limit the peak demand, thereby almost eliminating nuisance circuit breaker tripping.





50 Amp EMS Distribution Panel with inverter sub panel P/N 00-00683-300

Large appliances, such as air conditioners, water heater, washer/dryer, coffee maker, etc., whose use can be temporarily postponed, are automatically controlled. Temporarily postponing their use leaves enough power to operate the "on demand" appliances, such as the microwave, hair dryer, or toaster.

Smart EMS turns off each controlled appliance when the total current in the RV exceeds 30 amps. It will restore appliance power when the total current drops below a level that allows it to operate again.

## OPTIONAL REMOTE MONITOR PANEL



50 Amp EMS Display Panel P/N 00-00684-100

The optional remote monitor panel displays a digital readout of the total amount of current being drawn by all the loads in the coach. A series of LED's indicate the loads that have power applied. When the power is available, the LED will be on. The panel includes a switch to select operation from 30 amp or 20 amp service. This panel is easily connected with a small four conductor harness.

P/N 53-00683-300 Rev. C 121603