

## TruckMate Dc-Dc Converter

## Supplier – AMS Solutions



**TruckMate** Dc-Dc Converters are manufactured for the Trucking Industry to cater for and make Truck Horse and Trailers electrical compatible. **TruckMate** converts 12Vdc to 24Vdc. This technology allows Horses configured for 12Vdc, fitted with a **TruckMate**, to smoothly connect to Trailers configured for 24Vdc. **TruckMate** converts 12Vdc to 24Vdc, there is no need to make other electrical conversions to 24Vdc configured Trailers to make it compatible to Horses configured for 12Vdc. **TruckMate** has been field-tested and have has been successfully deployed at various Freight Trucking Vendors.

**TruckMate** consists of two main Electronic Modules, housed inside a industrial metal enclosure. **TruckMate** fits inside the Horse unit. (Note - It is not protected against wet environment such as rain.) **TruckMate** employs standard automotive Relays as its channel switching elements. In addition, each Output channel is fuse-protected. Both the Relays and Fuses are ergonomically integrated in the enclosure to make it esthetic appealing as well as in-truck functional to maintain.

**TruckMate** offers various protection features to make it easy for Field Service –  
(No removing of the unit to replace Protection components such as Relays and Fuses)

### Specifications –

Input V : 11–13.8Vdc Output V : 24Vdc  
Current Rating : 15A Peak/10A Continuous

### Input Channel Configuration–

- Battery GND
- Battery Supply (+12Vdc)
- Tail Light
- Brake Light
- Left Indicator
- Right Indicator
- Auxiliary

### Output Channel Configuration–

- Tail Light
- Brake Light
- Left Indicator
- Right Indicator
- Auxiliary
- Fixed 24Vdc (e.g. for Printer PSU)
- Battery GND

### Connection Termination –

ScrewTerminals to except standard Fork Spade  
Crimp Lugs

### Mounting–

**TruckMate** is housed inside a sturdy industrial enclosure with four easy-to-mount holes

### -Advantages using TruckMate –

- Use standard off-the-shelf automotive Fuses and Relays
- Output Channels fused-protected
- Inverter protection - Resettable Trip-Fuse
- If the Fuses or Relays go faulty, it can be replaced on the road by the Driver, minimizing Truck on-the-road- Down Time

### Protection–

- Standard Automotive Blade Fuses on all Output Channels
- LED Indicators to show Fuse State
- Relays as switching elements

**TruckMate** uses standard off-the-shelf automotive relays. The relays can be replace on the unit, without removing the unit or wiring.

**TruckMate** makes for easy repairs whilst on the road. No Service Technicians required, short Truck downtime. (No more expensive switching element semi-conductors that can go faulty due to electrical spikes or abusive use!!)

### Inverter Protection–

- Resettable Trip-fuse mounted on the frontpanel. This Fuse protects the Converter module from permanent damage. If it trips, it can be reset by the Driver.

### Operating Mode Selection –

**TruckMate** is fitted with a Rotary Switch to select the Operating Mode -

- OFF – Switches **TruckMate** Off
- 24VDC - 24Vdc to Output Channels in relation to the Input Channels (Normal Operation)
- 12VDC - 12VDC to Output Channels in relation to the Input Channels (Trailer config 12Vdc)
- BYPASS - 12VDC is bypassed directly to the Tail Lights, all other Output Channels not active (This is in the unlikely event that the Inverter module is faulty)

### Manufacturer and Supplier –

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