



Features:

- Wide range suitable for mobile applications
- Non isolated step up and step down models
- Convection cooled up to 240W
- Some models suitable for battery charging
- Fully encapsulated model
- Parallel operation for increased power possible

Description:

The OR1 series of DC/DC converters find extensive use in mobile applications where a 24V DC source is available to power 12V equipment, or where there is a 12V DC source required to power 24VDC equipment.

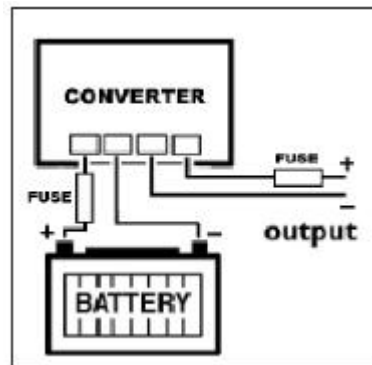
The OR1 series does not provide galvanic isolation between the input and output, in other words the input and output share the same common negative terminal. Galvanic isolation is usually not a requirement in many mobile applications where the DC source is a battery. For models with Galvanic isolation please look at the OR2 series.

Models with 13.8VDC output can be used as battery chargers to charge a 12V battery from a 24V source.

One model the OR1-24-12-5-ENC is fully encapsulated for applications where the converter can be exposed to dust and moisture.

Parallel operation is possible for increased output current, models up to 240W are convection cooled. The OR1 series is built with a rugged construction for increased reliability in mobile and marine applications.

Installation Instructions



The converter must be mounted securely in a cool, dry location. Connect the negative input leads to Vin negative terminal on the converter.

CAUTION: A bad negative connection could make the output voltage equal to the input voltage!

Connect the input lead via a fuse to the input terminal. At this point make sure that the output voltage is OK. If it is, you may safely connect the equipment to the output terminals via a fuse. (Fuse value equal to the output current).

CAUTION: Output current can be very high. Always use cables of sufficient diameter! If no input and output fuse are used then warranty is void.

Model Selection Table

MODEL	Vin	Vout	Iout	Power	I no Load	Fan Cooling	Weight (kg)	Temp Rise °C
OR1-24-12-5-ENC	18-35	12V	5A	60W	5 mA	NO	0.39	30
OR1-24-12-5	18-35	13.8V	5.5A	75W	5 mA	NO	0.17	30
OR1-24-12-8	18-35	13.8V	8A	110W	5 mA	NO	0.25	20
OR1-24-12-12	18-35	13.8V	12A	165W	5 mA	NO	0.26	30
OR1-24-12-20	20-35	13.8V	20A	276W	0.25 mA	NO	0.48	25
OR1-24-12-30	20-35	13.8V	30A	414W	0.25 mA	YES	0.6	33
OR1-24-12-60	20-35	13.8V	60A	828W	0.5 mA	YES	1.2	33
OR1-12-24-7	9-18	24V	7A	168W	15 mA	NO	0.3	30
OR1-12-24-10	9-18	24V	10A	240W	15 mA	NO	0.4	30