

Orion-Tr DC-DC converters isolated: 100 Watt series

www.victronenergy.com



Orion-Tr 12/24-5 (120W)



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Remote on-off

The remote on-off eliminates the need for a high current switch in the input wiring. The remote on-off can be operated with a low power switch or by for example the engine run/stop switch (see manual).

Adjustable output voltage: can also be used as a battery charger

For example to charge a 12 Volt starter or accessory battery in an otherwise 24V system.

All models are short circuit proof and can be paralleled to increase output current

An unlimited number of units can be connected in parallel.

IP43 protection

When installed with the screw terminals oriented downwards.

Screw terminals

No special tools needed for installation.

Input fuse (not replaceable)

On 12V and 24V input models only.

Isolated converters	Orion-Tr 12/12-9 (110W)	Orion-Tr 12/24-5 (120W)	Orion-Tr 24/12-9 (110W)	Orion-Tr 24/24-5 (120W)	Orion-Tr 24/48-2,5 (120W)	Orion-Tr 48/12-9 (110W)	Orion-Tr 48/24-5 (120W)	Orion-Tr 48/48-2,5 (120W)
Input voltage range	8-17V	8-17V	16-35V	16-35V	16-35V	32-70V	32-70V	32-70V
Under voltage shut down	7V	7V	14V	14V	14V	28V	28V	28V
Under voltage restart	7,5V	7,5V	15V	15V	15V	30V	30V	30V
Nominal output voltage	12,2V	24,2V	12,2V	24,2V	48,2V	12,2V	24,2V	48,2V
Output voltage adjust range	10-15V	20-30V	10-15V	20-30V	40-60V	10-15V	20-30V	40-60V
Output voltage tolerance	+/- 0,2V	+/- 0,2V	+/- 0,2V	+/- 0,2V	+/- 0,2V	+/- 0,2V	+/- 0,2V	+/- 0,2V
Output noise	2mV rms	2mV rms	2mV rms	2mV rms	2mV rms	2mV rms	2mV rms	2mV rms
Cont. output current at nominal output voltage and 25°C	9A	5A	9A	5A	2,5A	9A	5A	2,5A
Maximum output current (10 s) at nominal output voltage	12,5A	6,3A	12,5A	6,3A	3,0A	12,5A	6,3A	3,0A
Short circuit output current	32A	23A	39A	30A	19A	27A	25A	17A
Cont. output power at 25°C	110W	120W	110W	120W	120W	110W	120W	120W
Cont. output power at 40°C	85W	110W	85W	115W	115W	85W	100W	85W
Efficiency	87%	88%	85%	87%	88%	87%	86%	89%
Off load current	< 50mA	< 80mA	< 40mA	< 60 mA	< 120mA	< 50mA	< 60mA	< 80mA
Galvanic isolation	200V dc between input, output and case							
Operating temperature range	-20 to +55°C (derate 3% per °C above 40°C)							
Humidity	Max. 95% non-condensing							
DC connection	Screw terminals							
Maximum cable cross-section	6 mm ² AWG10							
Weight	0,42 kg (1 lb)							
Dimensions hwxwd	100 x 113 x 47 mm (4.0 x 4.5 x 1.9 inch)							
Standards: Safety Emission Immunity Automotive Directive	EN 60950 EN 61000-6-3, EN 55014-1 EN 61000-6-2, EN 61000-6-1, EN 55014-2 ECE R10-4							