

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

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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 24 V 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

On 12V and 24V input models only

Isolated converters	Orion-Tr 12/12-9 (110 W)	Orion-Tr 12/24-5 (120 W)	Orion-Tr 24/12-9 (110 W)	Orion-Tr 24/24-5 (120 W)	Orion-Tr 24/48-2,5 (120 W)	Orion-Tr 48/12-9 (110 W)	Orion-Tr 48/24-5 (120 W)	Orion-Tr 48/48-2,5 (120 W)
Input voltage range	8-17V	8-17 V	16-35 V	16-35 V	16-35 V	32-70 V	32-70 V	32-70 V
Under voltage shut down	7 V	7 V	14 V	14 V	14 V	28 V	28 V	28 V
Under voltage restart	7,5 V	7,5 V	15 V	15 V	15 V	30 V	30 V	30 V
Nominal output voltage	12,2 V	24,2 V	12,2 V	24,2 V	48,2 V	12,2 V	24,2 V	48,2 V
Output voltage adjust range	10-15 V	20-30 V	10-15 V	20-30 V	30-60 V	10-15 V	20-30 V	30-60 V
Output voltage tolerance	+/- 0,2 V	+/- 0,2 V	+/- 0,2 V	+/- 0,2 V	+/- 0,2 V	+/- 0,2 V	+/- 0,2 V	+/- 0,2 V
Output noise	2 mV rms	2 mV rms	2 mV rms	2 mV rms	2 mV rms	2 mV rms	2 mV rms	2 mV rms
Cont. output current at nominal output voltage and 25°C	9 A	5 A	9 A	5 A	2,5 A	9 A	5 A	2,5 A
Maximum output current (10 s) at nominal output voltage	12,5 A	6,3 A	12,5 A	6,3 A	3,0 A	12,5 A	6,3 A	3,0 A
Short circuit output current	32 A	23 A	39 A	30 A	19 A	27 A	25 A	17 A
Cont. output power at 25°C	110 W	120 W	110 W	120 W	120 W	110 W	120 W	120 W
Cont. output power at 40°C	85 W	110 W	85 W	115 W	115 W	85 W	100 W	85 W
Efficiency	87%	88%	85%	87%	88%	87%	86%	89%
Galvanic isolation	200 V 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							
Dimensions h x w x d	100 x 113 x 47 mm							
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 EN 50498							