

Orion IP67 24/12 and 12/24 DC-DC Converters

www.victronenergy.com

Non-isolated

Completely encapsulated: waterproof, shockproof and ignition protected

Water, oil or dirt will not damage the Orion IP67 DC-DC Converter. The casing is made of cast aluminium and the electronics are moulded in resin.

Extra-long input and output cables

Thanks to the cables of 1.8 meters in length, intermediate cable interconnections to increase length even more will in most cases not be needed. This is an important reliability increasing feature in an area where IP67 protection grade is needed.

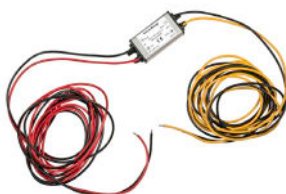
Wide input voltage range

With 15 to 40 Volts input range, a stable output is ensured during surges or sags due to other equipment connected to same battery.

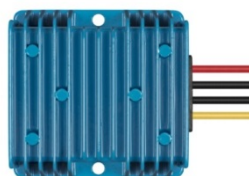
Protected against overheating

It can be used in a hot environment such as a machine room.

Orion IP67	24/12-5		24/12-10	24/12-20	24/12-100	12/24-50
Input voltage range	15-40VDC				18-35VDC	10-15VDC
Under voltage shutdown	13V				15V	8V
Under voltage restart	14V				16V	9V
No load current at 24V	1mA	20mA	50mA	85mA	45mA	
DC output voltage	12V +/- 3%	12V +/- 3%	12V +/- 3%	12V +/- 3%	24V +/- 3%	
Maximum continuous output current	5A	10A	20A	100A	50A	
Efficiency	93%	93%	95%	96%	96%	
Ripple & Noise	75mVpp			150mVpp		
Operating temperature range (derate 3% per °C above 40°C)	-40 to +70°C (full rated output up to 40°C)					
Overload protection	Hiccup mode, recovers automatically after fault condition is removed					
Short circuit proof	Yes					
Protection against reverse polarity connection	With external fuse or circuit breaker (not included)					
ENCLOSURE						
Material & Colour	Aluminium (blue RAL 5012)					
Protection category	IP67					
DC connection	Two input and two output cables, length 1,8m			Bolts M6		
Cable cross section, input	0,8mm² (18 AWG)	1,5mm² (15 AWG)	2,6mm² (13 AWG)	n.a.	n.a.	
Cable cross section, output	0,8mm² (18 AWG)	1,5mm² (15 AWG)	2,6mm² (13 AWG)	n.a.	n.a.	
Weight (kg)	50 g	300 g	300 g	2,15 kg	3 kg	
Dimensions (h x w x d in mm)	25 x 43 x 20	74 x 74 x 32	74 x 74 x 32	265 x 127 x 63	340 x 127 x 63	
STANDARDS						
Safety	EN 60950					
Emission	EN 61000-6-3, EN 55014-1					
Immunity	EN 55014-2, EN 61000-6-1, EN 61000-6-2					
Automotive Directive	ECE R10-4					
Vibration	IEC 68-2-6: 10-150 Hz / 1.0 G					



Orion IP67 24/12-5
with 1,8 m cables



Orion IP67 24/12-10
Orion IP67 24/12-20



Orion IP67 24/12-100
Orion IP67 12/24-50