

# Orion DC-DC Converters, isolated

360W models and special purpose models

[www.victronenergy.com](http://www.victronenergy.com)

| Isolated Converters   | Orion xx/yy-360W                 |
|---|----------------------------------|
| Power rating (W)  | 360                              |
| Galvanic isolation  | yes                              |
| Temperature increase after 30 minutes at full load (°C)                                   | 30                               |
| Fan assisted cooling (temp. controlled)   | yes                              |
| Weight kg (lbs)   | 1,4 (3.1)                        |
| Dimensions hxxwx d in mm (hxxwx d in inches)  | 82 x 132 x 190 (3.2 x 5.2 x 7.5) |
| Input voltage (xx): 12V (9 – 18V) or 24V (20 – 35V) or 48V (30 – 60V) or 110V (60 – 140V) |                                  |
| Output voltage (yy): 12,5V, 24V or 48V  |                                  |

| Isolated 24V battery charger: Orion 12/27,6-12                             |
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| Input 9 – 18V, output 27,6V, current limit 12A, fan assisted cooling       |
| Output voltage adjustable with potentiometer                               |
| Weight 1,4kg (3.1 lbs), dimensions 64 x 163 x 160mm (2.5 x 6.4 x 6.3 inch) |

| Isolated buck-boost regulator: Orion 7-35/12-3   |
|--|
| Input 7 – 35V, output 12,6V current limit 3A, derate current linearly from 3A at 18V to 1,5A at 7V |
| Weight 1,4kg (3.1 lbs), dimensions 64 x 163 x 160mm (2.5 x 6.4 x 6.3 inch)                         |

| Common Characteristics   |   |
|--|---|
| Output voltage stability   | 2% (Orion 12/24-7 and Orion 12/24-10: + 0% / - 5%)  |
| Output voltage tolerance   | 3%  |
| Output noise   | < 50mV rms  |
| Off load current   | < 25mA (isolated converters)  |
| Efficiency   | Non-isolated: appr. 92% Isolated: appr. 85%   |
| Isolation  | > 400Vrms between input, output and case (isolated products only)   |
| Operating temperature  | - 20 to + 40°C (0 to 100°F). Derate linearly to 0A at 70°C (160°F)  |
| Humidity   | Max 95% non-condensing  |
| Casework   | Anodised aluminium  |
| Connections  | 6.3mm (2.5 inch) push-on flat blade connectors  |
| Protection: Overcurrent<br>Overheating<br>Reverse polarity connection<br>Overvoltage | Short circuit proof<br>Reduction of output voltage<br>Fuse and reverse connected diode across input<br>Varistor (also protects against load dump) |
| Standards: Safety<br>Emission<br>Immunity<br>Automotive Directive                    | EN 60950<br>EN 61000-6-3, EN 55014-1<br>EN 61000-6-2, EN 61000-6-1, EN 55014-2<br>ECE R10-4   |



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