

# Orion DC-DC Converters, high power

Non-isolated – latest models

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



**Orion 24/12-30**

## Remote on-off connector

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 the engine run/stop switch (see manual).

## All models with adjustable output 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 with adjustable output can be paralleled to increase output current

Up to five units can be connected in parallel.

## Easy to install

Delivery includes four Insulated Fastons Female Crimp 6.3mm (six Fastons in case of the Orion 24/12-60).

## Low power models: please see Orion-Tr series



**Orion 24/12-60**



**Orion 24/12-80**



**Orion 24/12-80 with binding posts**

| Non isolated converters                                   | Orion 24/12-30                                                                 | Orion 24/12-60            | Orion 24/12-80                              | Orion 12/24-8           | Orion 12/24-10                   | Orion 12/24-25                   |
|-----------------------------------------------------------|--------------------------------------------------------------------------------|---------------------------|---------------------------------------------|-------------------------|----------------------------------|----------------------------------|
| Part number                                               | ORI241230022                                                                   | ORI241260020              | ORI241280020<br>ORI241280030 (binding post) | ORI122408020            | ORI122410020                     | ORI122425020                     |
| Input voltage range (V)                                   | 18-35                                                                          | 18-35                     | 18-35                                       | 9-18                    | 9-18                             | 9-18                             |
| Under voltage shutdown (V)                                | 14                                                                             | 14                        | 14                                          | 8                       | 8                                | 8                                |
| Under voltage restart (V)                                 | 18                                                                             | 18                        | 18                                          | 10                      | 10                               | 10                               |
| Output voltage adjustable with potentiometer              | yes                                                                            | no                        | yes                                         | no                      | yes                              | yes                              |
| Output voltage (V)                                        | Adjustable 10-15V<br>F set 13,2V                                               | 13,2                      | Adjustable 10-15V<br>F set 13,2V            | 24                      | Adjustable 20-30V<br>F set 26,4V | Adjustable 20-30V<br>F set 26,4V |
| Efficiency (%)                                            | 96                                                                             | 95                        | 92                                          | 95                      | 95                               | 93                               |
| Suitable to buffer-charge a battery                       | yes                                                                            | no                        | yes                                         | no                      | yes                              | yes                              |
| Can be connected in parallel                              | yes                                                                            | no                        | yes                                         | no                      | yes                              | yes                              |
| Continuous output current (A)                             | 30                                                                             | 60                        | 80                                          | 8                       | 10                               | 25                               |
| Max. Output current (A)                                   | 40                                                                             | 70                        | 90                                          | 20                      | 20                               | 30                               |
| Fan assisted cooling (temp. controlled)                   | no                                                                             | yes                       | yes                                         | no                      | no                               | yes                              |
| Galvanic isolation                                        | no                                                                             | no                        | no                                          | no                      | no                               | no                               |
| Off load current                                          | < 15mA                                                                         | < 20mA                    | < 20mA                                      | < 10mA                  | < 15mA                           | < 30mA                           |
| Remote on-off                                             | yes                                                                            | yes                       | yes                                         | no                      | no                               | yes                              |
| Operating temperature range (derate 3% per °C above 40°C) | -20 to +55°C                                                                   | -20 to +55°C              | -20 to +55°C                                | -20 to +55°C            | -20 to +55°C                     | -20 to +55°C                     |
| DC connection                                             | Faston tabs 6.3 mm                                                             | Double Faston tabs 6.3 mm | M6 bolts                                    | Faston tabs 6.3 mm      | Faston tabs 6.3 mm               | M6 bolts                         |
| Weight kg (lbs)                                           | 0,7 (1.55)                                                                     | 0,85 (1.9)                | 0,9 (2.0)                                   | 0,4 (0.8)               | 0,4 (0.9)                        | 0,9 (2.0)                        |
| Dimensions hwxwd in mm (hwxwd in inches)                  | 65x88x160 (2.6x3.5x6.3)                                                        | 65x88x185 (2.6x3.5x7.3)   | 65x88x195 (2.6x3.5x7.7)                     | 45x90x115 (1.8x3.5x4.5) | 45x90x125 (1.8x3.5x4.5)          | 65x88x195 (2.6x3.5x7.7)          |
| Standards: Safety<br>Emission<br>Immunity                 | EN 60950<br>EN 61000-6-3, EN 55014-1<br>EN 61000-6-2, EN 61000-6-1, EN 55014-2 |                           |                                             |                         |                                  |                                  |