









## DC Master

## Specifications

## Non-Isolated

|                                      |  24/12-3A |  24/12-6A |  24/12-12A |  24/12-24A |
|--------------------------------------|--|--|---|---|
| Part #                               | <b>81400100</b>  | <b>81400200</b>  | <b>81400300</b>   | <b>81400330</b>   |
| <b>Input Specifications</b>          |  |  |   |   |
| Nominal input voltage                | 24V  | 24V  | 24V   | 24V   |
| Input range                          | 20–32V DC  | 20–32V DC  | 20–32V DC   | 20–32V DC   |
| <b>Output Specifications</b>         |  |  |   |   |
| Nominal output voltage               | 13.6V  | 13.6V  | 13.6V   | 13.6V   |
| Maximum power                        | 82 W   | 136 W  | 245 W   | 408 W   |
| Nominal power                        | 41 W   | 82 W   | 164 W   | 326 W   |
| Current max. 2 minutes* / continuous | 6A / 3A  | 10A / 6A   | 18A / 12A   | 30A / 24A   |
| Parallel configuration               | yes, up to 10  | yes, up to 10  | yes, up to 10   | yes, up to 10   |
| DC consumption                       | <10 mA   | <10 mA   | <10 mA  | <10 mA  |
| <b>General Specifications</b>        |  |  |   |   |
| Dimensions, HxWxD                    | 2.6"x3.4"x2"<br>67x87x50 mm  | 3.5"x3.4"x2"<br>89x87x50 mm  | 5"x3.4"x2"<br>127x87x50 mm  | 5"x3.4"x2"<br>167x87x50 mm  |
| Weight                               | 0.5 lbs / 225 gr   | 0.6 lbs / 270 gr   | 0.9 lbs / 405 gr  | 1.4 lbs / 635 gr  |
| Approvals                            | CE, E-mark   | CE, E-mark   | CE, E-mark  | CE, E-mark  |
| Galvanic isolation                   | no   | no   | no  | no  |
| Stabilized                           | yes  | yes  | yes   | yes   |
| Connections input/output             | fast-on  | fast-on  | fast-on   | fast-on   |
| Temperature range (ambient temp.)    | -25°C–80°C, >30°C derating / -13°F–176°F, >86°F derating                                   |  |   |   |
| Cooling                              | natural cooling  | natural cooling  | natural cooling   | natural cooling   |
| Protection degree                    | IP53   | IP53   | IP53  | IP53  |

## Isolated

|                                      |  12/12-3A |  12/12-6A |  24/12-3A |  24/12-6A |
|--------------------------------------|--|--|--|--|
| Part #                               | <b>81500600</b>  | <b>81500700</b>  | <b>81500100</b>  | <b>81500200</b>  |
| <b>Input Specifications</b>          |  |  |  |  |
| Nominal input voltage                | 12V  | 12V  | 24V  | 24V  |
| Input range                          | 10–15.5V DC  | 10–15.5V DC  | 20–32V DC  | 20–32V DC  |
| <b>Output Specifications</b>         |  |  |  |  |
| Nominal output voltage               | 13.6V  | 13.6V  | 13.6V  | 13.6V  |
| Maximum power                        | 54 W   | 108 W  | 82 W   | 136 W  |
| Nominal power                        | 41 W   | 81 W   | 41 W   | 82 W   |
| Current max. 2 minutes* / continuous | 4A / 3A  | 8A / 6A  | 6A / 3A  | 10A / 6A   |
| Parallel configuration               | yes, up to 10  | yes, up to 10  | yes, up to 10  | yes, up to 10  |
| DC consumption                       | <100 mA  | <100 mA  | <10 mA   | <10 mA   |
| <b>General Specifications</b>        |  |  |  |  |
| Dimensions, HxWxD                    | 3.5"x3.4"x2"<br>89x87x50 mm  | 5"x3.4"x2"<br>127x87x50 mm   | 3.5"x3.4"x2"<br>89x87x50 mm  | 5"x3.4"x2"<br>127x87x50 mm   |
| Weight                               | 0.6 lbs / 290 gr   | 0.9 lbs / 410 gr   | 0.6 lbs / 290 gr   | 0.9 lbs / 410 gr   |
| Approvals                            | CE, E-mark   | CE, E-mark   | CE, E-mark   | CE, E-mark   |
| Galvanic isolation                   | yes  | yes  | yes  | yes  |
| Stabilized                           | yes  | yes  | yes  | yes  |
| Connections input/output             | fast-on  | fast-on  | fast-on  | fast-on  |
| Temperature range (ambient temp.)    | -25°C–80°C, >30°C derating / -13°F–176°F, >86°F derating                                     |  |  |  |
| Cooling                              | natural cooling  | natural cooling  | natural cooling  | natural cooling  |
| Protection degree                    | IP53   | IP53   | IP53   | IP53   |

\* Two minutes of extra power for short power boosts.

All DC Master converters come with a mounting bracket, screws and fast-ons.



24/12-50A  
**81400352**



12/24-3A  
**81400400**



12/24-7A  
**81400500**



48/12-6A  
**81400600**



48/12-9A  
**81400700**



48/12-20A  
**81400800**

|  |                             |                              |                             |                            |                            |
|--|-----------------------------|------------------------------|-----------------------------|----------------------------|----------------------------|
| 24V  | 12V                         | 12V                          | 48V                         | 48V                        | 48V                        |
| 20-32V DC  | 10-15.5V DC                 | 10-15.5V DC                  | 40-62V DC                   | 40-62V DC                  | 40-62V DC                  |
| 13.6V  | 27.2V                       | 27.2V                        | 13.6V                       | 13.6V                      | 13.6V                      |
| 720 W  | 109 W                       | 245 W                        | 109 W                       | 132 W                      | 326 W                      |
| 500 W  | 82 W                        | 191 W                        | 82 W                        | 108 W                      | 272 W                      |
| 60A / 50A  | 4A / 3A                     | 9A / 7A                      | 8A / 6A                     | 11A / 9A                   | 24A / 20A                  |
| yes, up to 10  | yes, up to 10               | yes, up to 10                | yes, up to 10               | yes, up to 10              | yes, up to 10              |
| <20 mA   | <110 mA                     | <120 mA                      | <15 mA                      | <15 mA                     | <15 mA                     |
| 11"x4.9"x2.9"<br>283x125x74 mm                           | 3.5"x3.4"x2"<br>89x87x50 mm | 6.6"x3.4"x2"<br>167x87x50 mm | 3.5"x3.4"x2"<br>89x87x50 mm | 5"x3.4"x2"<br>127x87x50 mm | 5"x3.4"x2"<br>217x87x50 mm |
| 4 lbs / 1.8 kg   | 0.6 lbs / 290 gr            | 1.3 lbs / 610 gr             | 0.9 lbs / 415 gr            | 0.9 lbs / 415 gr           | 1.7 lbs / 765 gr           |
| CE, E-mark   | CE, E-mark                  | CE, E-mark                   | CE, E-mark                  | CE, E-mark                 | CE, E-mark                 |
| no   | no                          | no                           | no                          | no                         | no                         |
| yes  | yes                         | yes                          | yes                         | yes                        | yes                        |
| screw terminal   | fast-on                     | fast-on                      | fast-on                     | fast-on                    | fast-on                    |
| -25°C-80°C, >30°C derating / -13°F-176°F, >86°F derating |                             |                              |                             |                            |                            |
| natural cooling  | natural cooling             | natural cooling              | natural cooling             | natural cooling            | natural cooling            |
| IP53   | IP53                        | IP53                         | IP53                        | IP53                       | IP53                       |



24/12-12A  
**81500300**



24/12-24A  
**81500350**



24/24-3A  
**81500400**



24/24-7A  
**81500500**

|  |                              |                            |                              |
|--|------------------------------|----------------------------|------------------------------|
| 24V  | 24V                          | 24V                        | 24V                          |
| 20-32V DC  | 20-32V DC                    | 20-32V DC                  | 20-32V DC                    |
| 13.6V  | 13.6V                        | 27.2V                      | 27.2V                        |
| 245 W  | 408 W                        | 109 W                      | 245 W                        |
| 164 W  | 326 W                        | 82 W                       | 191 W                        |
| 18A / 12A  | 24A / 30A                    | 4A / 3A                    | 9A / 7A                      |
| yes, up to 10  | yes, up to 10                | yes, up to 10              | yes, up to 10                |
| <10 mA   | <10 mA                       | <25 mA                     | <25 mA                       |
| 6.6"x3.4"x2"<br>167x87x50 mm                             | 8.5"x3.4"x2"<br>217x87x50 mm | 5"x3.4"x2"<br>127x87x50 mm | 8.5"x3.4"x2"<br>217x87x50 mm |
| 1.3 lbs / 590 gr   | 1.9 lbs / 850 gr             | 1.3 lbs / 590 gr           | 1.8 lbs / 820 gr             |
| CE, E-mark   | CE, E-mark                   | CE, E-mark                 | CE, E-mark                   |
| yes  | yes                          | yes                        | yes                          |
| yes  | yes                          | yes                        | yes                          |
| fast-on  | fast-on                      | fast-on                    | fast-on                      |
| -25°C-80°C, >30°C derating / -13°F-176°F, >86°F derating |                              |                            |                              |
| natural cooling  | natural cooling              | natural cooling            | natural cooling              |
| IP53   | IP53                         | IP53                       | IP53                         |

For detailed specifications, dimensional drawings, 3D files, images, certificates and manuals see **mastervolt.us**.