

Deka
duration®

BY MK BATTERY
DUAL VOLTAGE DD5300



Lithium Energy Storage System

DD5300

SINGLE MODULE LV/HV

DD5300



| BASIC PARAMETERS | DD5300 LV/HV |
|---------------------------------------|---|
| Cell Type | LiFePO4 Lithium Iron Phosphate (LFP) |
| Battery System Capacity | 5.3 kWh |
| Single Module Nominal Voltage | 52 Vdc |
| Application | Dual Voltage LV/HV |
| Modules Expandibility | HV-16 in series (up to 9 cluster in parallel with DD21002 HVBOX) LV-15 modules in parallel without DD21001 Intelligent Can Bus Combiner |
| Cluster Net Capacity | 556.5 kWh (LV) / 763.2 kWh (HV) |
| Voltage Range | 48.5-1000 Vdc |
| Net Capacity | 110 Ah |
| Usable Capacity | 100 Ah |
| Dimensions - L x W x H Inches (mm) | 23.35 x 18.50 x 6.42 (593 x 470 x 163) |
| Weight | 126.3 lb (57.3 kg) |
| Charge / Discharge Current | 110 A / 110 A (LV) |
| Discharge Current Peak | 200 A (5 sec) |
| Depth of Discharge | Up to 100% |
| Communication Port | RS485, CAN, 232, (Wi-Fi external device) |
| HV String Modules | Up to 16 |
| Discharge Temperature | -4 ~ +131°F (-20 ~ +55°C) |
| Charge Temperature | +14 ~ +131°F (-10 ~ +55°C) |
| Shelf Temperature | +14 ~ +122°F (-10 ~ +50°C) |
| Humidity | 5% ~ 95% |
| Altitude | <3000 m |
| Design life | 15 Years (77°F / 25°C) |
| Expected Cycle Life @ STC | Up to 7000 @ 86°F (30°C) (Testing is 1C @ 100% DoD with at least 80% residual capacity) |
| Standards | UL 1973 UL 9540A IEC62619 CE UN38.3 |
| Features | Pre-Charge + Fuse LV + Fuse HV + Auto Contactor + Dual BMS + Multi BMS FW Management |
| | Suitable for low voltage and high voltage systems, 4 protection levels with DD21002 HV BOX for HV application, BMS with real time balancing, adaptive charge/discharge CAN logic, 3 steps adaptive charging logic, 2xDI/DO programmable, mobile app for monitoring and remote control, update, debug, data save |

LOW VOLTAGE STACKABLE

DD5300



| BATTERY MODULE | 2 | 3 | 4 | 5 | 4+4 |
|---|---|--|--|--|--|
| Battery System Capacity | 10.6 kWh | 15.9 kWh | 21.2 kWh | 26.5 kWh | 42.4 kWh |
| Voltage Range | 48.5 - 58.4 Vdc | | | | |
| Dimensions - L x W x H Inches (mm) | 23.35 x 18.50 x 13.00 (593 x 470 x 330) | 23.35 x 18.50 x 19.50 (593 x 470 x 495) | 23.35 x 18.50 x 26.00 (593 x 470 x 660) | 23.35 x 18.50 x 32.50 (593 x 470 x 825) | (2x) 23.35 x 18.50 x 26.00 (2x) (593 x 470 x 660) |
| Weight | 252.6 lb (114.6 kg) | 378.9 lb (171.9 kg) | 505.2 lb (229.2 kg) | 631.5 lb (286.5 kg) | (2x) 505.2 lb (229.2 kg) |
| Depth of Discharge | 100% | | | | |
| Charge / Discharge (Recommend) | 160 | 240 | 320 | 400 | 640 |
| Current (A) (Continuous) (Peak 15 sec) (Discharge Peak 5 sec) | 210 300 400 | 300 380 600 | 390 470 800 | 480 560 1000 | 780 940 1600 |
| Communication Port | RS485, CAN, 232, (Wi-Fi external device) | | | | |
| Protection Class | IP23 / IP56 | | | | |
| Working Temperature | -4 ~ +140°F (-20 ~ +60°C) * | | | | |
| Storage Temperature | +14 ~ +104°F (-10 ~ +40°C) | | | | |
| Humidity | 5% ~ 95% | | | | |
| Altitude | < 3000 m | | | | |
| Design life | 15 Years (77°F / 25°C) | | | | |
| Expected Cycle Life @ STC | Up to 7000 @ 86°F (30°C) (Testing is 1C @ 100% DoD with at least 80% residual capacity) | | | | |
| Standards | UL 1973 UL 9540A IEC62619 CE UN38.3 | | | | |
| * See Warranty Terms and Conditions | | | | | |

LOW VOLTAGE WALL MOUNTED



HIGH VOLTAGE STACKABLE

DD5300



| BATTERY MODULE | 4 | 5 | 6 | 7 | 8 | 8+8 |
|--|---|--|--|---|---|---|
| Battery System Capacity | 21.2 kWh | 26.5 kWh | 31.8 kWh | 37.1 kWh | 42.4 kWh | 84.8 kWh |
| Recommended Voltage | min 200 max 232 | min 250 max 290 | min 300 max 348 | min 350 max 406 | min 400 max 464 | min 800 max 928 |
| Dimensions L x W x H Inches (mm) | 23.35 x 18.50 x 26.00 (593 x 470 x 660) | 23.35 x 18.50 x 32.50 (593 x 470 x 825) | 23.35 x 18.50 x 39.00 (593 x 470 x 990) | 23.35 x 18.50 x 45.47 (593 x 470 x 1155) | 23.35 x 18.50 x 52.00 (593 x 470 x 1320) | (2x) 23.35 x 18.50 x 52.00 (2x) (593 x 470 x 1320) |
| Weight | 505.2 lb (229.2 kg) | 631.5 lb (286.5 kg) | 757.8 lb (343.8 kg) | 884.1 lb (401.1 kg) | 1010.4 lb (458.4 kg) | (2x) 1010.4 lb (458.4 kg) |
| Depth of Discharge | 100% | | | | | |
| Charge /Discharge Current | 100 A / 100 A (HV) | | | | | |
| Communication Port | RS485, CAN, 232, (Wi-Fi external device) | | | | | |
| Protection Class | IP23 / IP56 | | | | | |
| Working Temperature | -4 ~ +140°F (-20 ~ +60°C) * | | | | | |
| Storage Temperature | +14 ~ +104°F (-10 ~ +40°C) | | | | | |
| Humidity | 5% ~ 95% | | | | | |
| Altitude | < 3000 m | | | | | |
| Design life | 15 Years (77°F / 25°C) | | | | | |
| Expected Cycle Life @ STC | Up to 7000 @ 86°F (30°C) (Testing is 1C @ 100% DoD with at least 80% residual capacity) | | | | | |
| Standards | UL 1973 UL 9540A IEC62619 CE UN38.3 | | | | | |
| * See Warranty Terms and Conditions | | | | | | |



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