

**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, RS232
HV String Modules	Up to 16
Operating Temperature	+14 ~ +131°F (-10 ~ +55°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 9540 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)	210	300	390	480	780
(Peak 15 sec)	300	380	470	560	940
(Discharge Peak 5 sec)	400	600	800	1000	1600
Communication Port	RS485, CAN, RS232				
Protection Class	IP23 / IP56				
Operating Temperature	+14 ~ +131°F (-10 ~ +55°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 9540 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, RS232					
Protection Class	IP23 / IP56					
Operating Temperature	+14 ~ +131°F (-10 ~ +55°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 9540 UL 9540A IEC62619 CE UN38.3					
* See Warranty Terms and Conditions						



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