

# High Voltage Lithium-Ion Phosphate Battery storage system - PowerCube-M3A-180

Battery Module: HM3A180



Module HM3A180

Basic Parameters		
Capacity(kWh)	5.68	
Nominal Voltage(Vdc)	38.4	
Nominal Capacity(AH)	148	
Voltage Range(Vdc)	32.4~43.2	
Depth of Discharge	90%	
Dimension(W*D*H,mm)	375×820×171.5	
Communication	CANBUS/Modbus RTU/TCP/IP	
Protection Class	IP20	
Weight(kg)	61	
Operation Temperature	0~50 <b>°C</b>	
Storage Temperature	-20~60 <b>°C</b>	
Product Certificate	UN38.3	





Main Controller: \$1000M3A180

Module \$1000M3A180

Basic Parameters	
Related Product	PowerCube-M3A180
AC Supply for BMS/FAN	100 - 290Vac/50Hz/1.3A
System Operation Voltage (Vdc)	0~1000
Operation Current (Max.) (A)	100
Self-consumption Power(W)	8
Dimension (W*D*H, mm)	375×710×171.5
Communication	MODBUS RTU/CAN
Protection Class	IP20
Weight(kg)	19
Operation Life	15+
Operation Temperature	-20~65
Storage Temperature	-40~80

#### **BMS Function**

#### Protection and Alarm

Charge/Discharge End
Charge Over Voltage
Charge/Discharge Over Current
High/Low Temperature
Operation Record
Administrator Monitor: Current, Voltage,
Temperature, SOC&SOH.

## Management and Monitor

Cells Balance
Intelligent Charge Model
Capacity Retention Calculate
Isolation and Protection
Alarm and Protection





Main Controller: \$1000M3A100

Module \$1500M3A180

Basic Parameters	
Related Product	PowerCube-M3A180
AC Supply for BMS/FAN	100 - 290Vac/50Hz/1.3A
System Operation Voltage (Vdc)	0~1500
Operation Current (Max.) (A)	100
Self-consumption Power(W)	8
Dimension (W*D*H, mm)	375×710×171.5
Communication	MODBUS RTU/CAN
Protection Class	IP20
Weight(kg)	19
Operation Life	15+
Operation Temperature	-20~65
Storage Temperature	-40~80

#### **BMS Function**

#### Protection and Alarm

Charge/Discharge End
Charge Over Voltage
Charge/Discharge Over Current
High/Low Temperature
Operation Record
Administrator Monitor: Current, Voltage,
Temperature, SOC&SOH.

### Management and Monitor

Cells Balance
Intelligent Charge Model
Capacity Retention Calculate
Isolation and Protection
Alarm and Protection



# Powercube M3A100 System Voltage < 1000V





## Module PowerCube-M3A-180

Basic Parameters	
Battery System Capacity (kWh)	5.68*n
Battery System Voltage (Vdc)	38.4*n
Battery System Capacity (AH)	148
Battery Module	HM3A180
Battery Capacity(kWh)	5.68
Battery Modules Qty. (Optional )	1~19
Battery System Charge Upper-Voltage (V)	43.2*n
Battery System Nominal Current(A)	29.6
Battery System Continuous Current (A)	148
Operation temp. range	10 ~ 40 <b>°C</b>
Battery System Discharge lower-Voltage (V	32.4*n
Round-trip efficiency (@1C-rate)	95%
Depth of Discharge	90%
Dimension(W*D*H, mm)	923*845*2130
Communication	CANBUS/Modbus RTU/TCP/IP
Weight (kg)	140kg+61kg*n
Operation Life	15+Years
Operation Temperature	10~40 <b>°C</b>
Storage Temperature	-20~60 <b>°C</b>
Humidity	5 - 95%(without condensing)
Altitude (m)	<4000
Product Certificate	IEC62619/VDE2510-50/CE/UN38.3



# Powercube M3A100 System Voltage < 1500V





Module PowerCube-M3A-180

Basic Parameters	
Battery System Capacity (kWh)	5.68*n
Battery System Voltage (Vdc)	38.4*n
Battery System Capacity (AH)	148
Battery Module	HM3A180
Battery Capacity(kWh)	5.68
Battery Modules Qty. (Optional )	1~32
Battery System Charge Upper-Voltage(V)	43.2*n
Battery System Nominal Current(A)	29.6
Battery System Continuous Current (A)	148
Operation temp. range	10 ~ 40 <b>°C</b>
Battery System Discharge lower-Voltage (V	/) 32.4*n
Round-trip efficiency (@1C-rate)	95%
Depth of Discharge	90%
Dimension(W*D*H, mm)	1365*845*2310
Communication	CANBUS/Modbus RTU/TCP/IP
Weight (kg)	180kg+61kg*n
Operation Life	15+Years
Operation Temperature	10~40 <b>°C</b>
Storage Temperature	-20~60 <b>°C</b>
Humidity	5 - 95%(without condensing)
Altitude (m)	<4000
Product Certificate	IEC62619/VDE2510-50/CE/UN38.3





