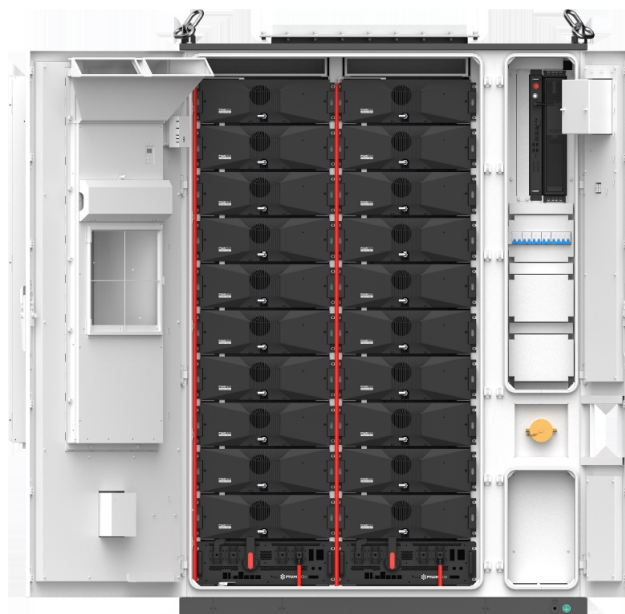


**M5-Optimus Cabinet  
Battery Energy Storage System  
Data Sheet**

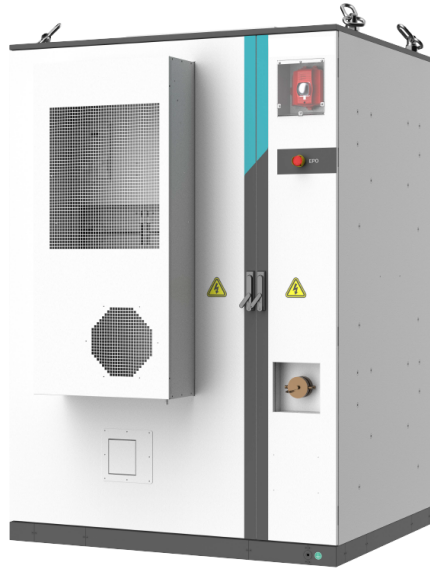
**Information Version: 1.0**

## Cabinet 1000V



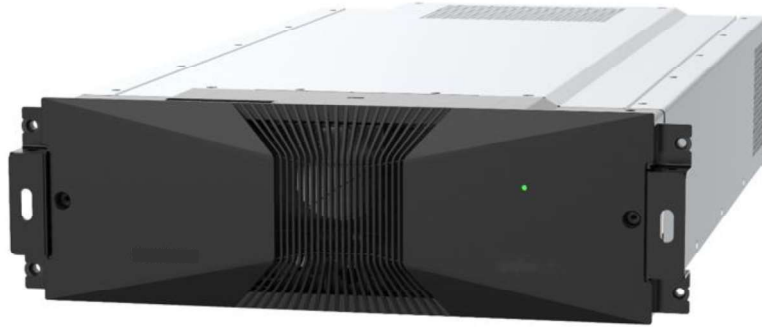
Product Type	PowerCube-M5-Optimus-1000V
Nominal Capacity (kWh)	313.6
Rated capacity (Ah)	490
Nominal voltage (VDC)	640
Upper limit charging voltage (VDC)	710
Final discharge voltage (VDC)	580
Maximum charging/discharging current (A)	360
Nominal charge/discharge current (A)	245
Max. charge/discharge power (kW)	157
Dimensions (W x D x H, mm)	1500*1250*2200
Weight (kg)	4200
Operation Temperature(°C)	-10~50°C
Storage Temperature(°C)	-20~60°C
Depth of Discharge (%)	95
Warranty (Year)	10
Min Capacity During Warranty Period	80%(≤0.5C-rate, 1cycle/day or Equivalent)
Round-trip Efficiency	96%(at Continuous 0.5C-rate)

## Cabinet 1500V



Product Type	PowerCube-M5-Optimus-1500V
Nominal Capacity (kWh)	329.3
Rated capacity (Ah)	245
Nominal voltage (VDC)	1344
Upper limit charging voltage (VDC)	1491
Final discharge voltage (VDC)	1218
Maximum charging/discharging current (A)	180
Nominal charge/discharge current (A)	122.5
Max. charge/discharge power (kW)	165
Dimensions (W x D x H, mm)	1500*1250*2200
Weight (kg)	4500
Operation Temperature(°C)	-10~50°C
Storage Temperature(°C)	-20~60°C
Depth of Discharge (%)	95
Warranty (Year)	10
Min Capacity During Warranty Period	80%(≤0.5C-rate, 1cycle/day or Equivalent)
Round-trip Efficiency	96%(at Continuous 0.5C-rate)

## Battery Module



Product Type	HM5A180F
Cell Technology	LiFePO4 (LFP)
Battery Module Energy (kWh)	15.68
Battery Module Voltage (VDC)	64
Battery Module Capacity (Ah)	245
Power of BMU(W)	3
Power of Battery Module Fan (W)	15.6
Dimensions (W x D x H, mm)	515(W) x 935 (D) x 160.5(H)
Protection Class	IP20
Weight (kg)	115
Operation Cycle Life (cycle)*	>7,000
Operation Temperature(°C)	0 ~ 50
Storage Temperature(°C)	-20 ~ 50
Transportation Certificate	UN38.3

\* Cycle life is defined based on specific operation conditions, for more details please check with Pylontech service team.

## Control Module



Product Type	S1500M5A180L
Related Product	M5A-180
AC Supply for BMS*	100~305VAC/50/60Hz
Fan Power Consumption (W)	15.6 x n(where n = 1~21)
System Operation Voltage (VDC)	0~1500
Operation Current (Maximum) (A)	180
Self-consumption Power-Relay On(W)	16.5
Instantaneous power of relay engagement(W)**	65.4
Dimensions (W x D x H, mm)	460(W)*858(D)*160(H)
Communication Protocol	RS485(MODBUS RTU)\CAN\LAN
Protection Class	IP20
Weight(kg)	28
Operation Life (year)	15+
Operation Temperature(°C)	-20~65
Storage Temperature(°C)	-40~80

\*AC power @100~305 VAC/50/60Hz supply to BMS and air fan separately.

\*\* Instantaneous power consumption of each relay is 56.4W, which happens when relay acting.