

# H48050

## High voltage lithium battery

### H48050 - 2.4 kWh Modules

Pylontech's H48050 lithium batteries represents the latest technological frontier for high voltage storage applications. The simplicity and modularity of the H48050, make it an ideal component for creating storage systems of small and large capacities, which can be expanded according to current and future energy needs.



LiFePO4 battery technology also has the following **benefits**:

- **Longer Life cycle**, which exceeds 5000 cycles, corresponding to about 11 years of work, with an 80% end-of-life capacity;
- The internal **molecular structure** of LiFePO4 batteries is **more stable** and **safer**;
- Depth of discharge up to 95%;
- **Easy expansion** to increase the power of storage;
- A **Compact and modular design** for easy installation / upgrade;
- Ability to operate under different temperature conditions;
- **Advanced BMS** that allows you to report alarms in real time.
- **Monitoring and assistance included.**



**SC0500-40S-V2** Control module  
Related product: PowerCube X1-X2 V2, PowerCube H1-H2 V2



**SC0500-100S-V2 / SC1000-100S-V2** Control module  
Related product: PowerCube X1-X2 V2, PowerCube H1-H2 V2



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Battery Model		H48050
Item code		90040200
<b>ELECTRICAL DATA</b>		
Cell technology		Li-ion (LFP)
Nominal voltage [V] (single module)		48
Nominal capacity [kWh/Ah] (single module)		2.4 / 50
Depth of discharge DOD [%]		95
Current [A]		25 (nominal) - 50 (max)
Charge voltage [V, min.~max.]		43.5 ~ 54
<b>BUS</b>		
Communication Bus		RS232, CAN
Communication protocol		YD/T 1363.3-2005
<b>GENERAL DATA</b>		
Dimension [WxHxD, mm]		442x100x390
Weight [kg]		24
Charge/ discharge operation temperature [°C]		0 ~ 50
Storage Temperature [°C]		-20 ~ 60
Protection Class		IP20
Operation Life at 25 °C [years]		15+
Life Cycles		5000
Backup time [Nominal power 500 W]		≥ 5 h
Duration of charge maintenance		6 months with off battery
Transfer certificate		UN38.3, UN 3090
EMC		IEC 61000, EN 55022, GR-1089, GB/T 2423, TÜV, CE, TLC

Note: When choosing the number of modules to connect inside the rack, make sure that the resulting DC voltage is within the operating range of the inverter.  
For the selection of 19" racks sizes, please refer to the available documentation.



GR-1089, UN 3090, EN55022, GB/T 2423

BMS Control Module	SC0500-40S-V2	SC0500-100S-V2	SC1000-100S-V2
Item code	90040272	90040273	90040274
ELECTRICAL DATA			
Related product	PowerCube X1-X2 V2, PowerCube H1-H2 V2		
Battery modules quantity [pcs]	up to 10	up to 18	
Self-consumption power [W]	8		
Operating voltage [Vdc]	60~600	200~1000	
System working voltage [Vdc]	60~600	200~1000	
Discharge voltage [Vdc]	60~600	200~1000	
Max. Charging current [A]	40	80	
Communication	Modbus RTU\CAN\LAN		
GENERAL DATA			
Dimension [WxHxD, mm]	442×87×390	442×132×390	
Weight [kg]	7	9	
Operating temperature [°C]	-20~65		
Storage temperature [°C]	-40~80		
Protection Class	IP20		
Design Life [years]	15+		
Transport certificate	UN38.3		
Certification	TUV, CE		

Energy S.p.A.

Registered office:

Piazza Manifattura, 1

38068, Rovereto TN

Tel. +39 0464 350812 - Fax +39 0464 350512



www.energyspa.com  
www.retiintelligenti.com

Energy S.p.A.

Operations/Warehouse:

Via Zona Industriale, 10 - 35020

Sant'Angelo di Piove di Sacco (PD) - Italy

info@energysynt.com

Tel. +39 049 2701296 - Fax +39 049 8599098