

Pylontech Energy Storage

81 kWh / 36 kW

Multi-purpose energy storage

- Fully compatible with the EnergyHub system
- Safe LiFePO4 technology
- Long life, +4000 cycles
- Integrated 36 kW DC/DC converter
- Parallel cabinet operation for more capacity



DC coupled energy storage

The Pylontech Energy Storage cabinet with storage capacity 81 kWh and power capacity up to 36 kW connects directly to your EnergyHub DC nanogrid. The versatile storage can be configured to achieve combined functions such as reducing peak power cost, enable faster Electric Vehicle charging and maximizing self-consumption of PV energy.

	DC coupled energy storage
Battery	Pylontech 81/36
Storage capacity, W_{NOM}	90 kWh
Useable capacity @ 90% DoD	81 kWh
Maximum power rating, P_{MAX}	36 kW
Nominal battery voltage, V_{NOM}	608 V
Maximum cont. battery charge current, $I_{BAC}^{1)}$	60 A
Maximum cont. battery discharge current, $I_{BAD}^{1)}$	60 A
Electrical roundtrip efficiency incl. DC/DC converter	93 % typical
Cycle life ²⁾	4000 cycles @ 80% DoD, EOL capacity 80%
Cell chemistry	LiFePO4
Maximum battery potential to ground	1000 Vpk
Battery fuses	20 A, 1000 V, 10x38 mm gPV
SOC precision	$\leq 5\%$
Standby consumption incl. DC/DC converters	$\leq 20\text{ W}$
Protection functions	Over voltage, over temperature, over current, isolation fault, pre-charge protection, short-circuit protection
DC nanogrid	
Number of included ESO DC/DC converters	6
DC bus voltage, V_{DC}	760 V (nominal)
DC bus voltage range, V_{DC}	720 - 800
Maximum DC bus current, $I_{DC(max)}$	64 A
DC bus connection	3-wire (L+, L-, PE)
DC bus communication	Narrow band power line communication (PLC)
Physical	
Dimensions H x W x D	2130 x 815 x 659 mm
Weight	1060 kg
Color	Black
Installation	
Ambient temperature ³⁾	0°C - 40°C
Humidity	10 - 90% RH non condensing
Degree of protection	IP 20
BMS Power supply	230 VAC
Compliance	
Battery safety	EN 62619, UN38.3
LVD	EN 62477-1
EMC	EN 61000-6-3, EN 61000-6-2

- 1) Maximum battery current will be derated based on temperature and state of charge
- 2) Cycle life specified at SOC from 10% - 90%, C-rate of 0.5 and ambient temperature of +25°C
- 3) Battery power may be derated for temperatures exceeding +30°C