

# Pwr.Vault 100K - 220

## Outdoor Solution:

Pwr.Vault 100K 220 is a plug & play system for managing, converting and exploiting energy in systems with high power requirements. The size of the storage allows deferred use of all the accumulated energy for several hours. Integrated EMS to maximize self-consumption and allow peak shaving.

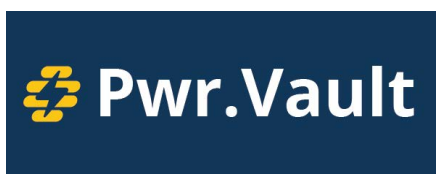
- ✔ Compact design for outdoor installation 100 kW / 220 kWh
- ✔ All in one LFP Pylontech batteries
- ✔ Triple section bearing structure in polyester powder coated galvanized sheet
- ✔ Degree of protection IP54
- ✔ HVAC system to maintain optimum operating temperatures and promote design life.
- ✔ DC and AC circuit breakers and magnetic switch included
- ✔ Batteries installed and factory pre-wired electrical panel up to the user side interfaces
- ✔ AC 400V 3Ph +N + PE type power supply for On-Grid systems
- ✔ Suitable for Ex Novo or Retrofit systems
- ✔ Management of diversified, renewable or non-renewable sources (such as generators)

## Dimensions:

Width: 1610 mm  
Height: 2279 mm  
Depth: 1325 mm



zeroCO<sub>2</sub> - XL SHELL 100K 220



<b>Pwr.Vault 100-220</b>	
Dimensions [WxHxD, mm]	1610 x 2276 x 1325
Weight [kg]	3500
Sound power [dB]	<70
Sound pressure [dB(A)]	59 (*)
PCS technology	Transformerless
<b>AC parameters</b>	
Rated / apparent power [kW/kVA]	3*30/33
AC input type	5 wire (3Ph + N + PE)
Number and maximum connection cable section per phase [mm <sup>2</sup> ]	2 x 120 (L1, L2, L3, N) Tip - 1 x 10 Eyelet M6 (PE)
Voltage range [V]	400 (±10%)
Rated / max electric current [A]	±43/56
Frequency [Hz]	50/60
Power factor	0,8 ~ 1 (Leading / Lagging)
Current DC component [%]	≤ 0,5
Harmonic content THDi [%]	≤ 3
AC and DC start function	yes
Current switching time [ms]	≤ 10
Conversion efficiency [%]	≥ 97
Standby power consumption [W]	<25
Permissible short-circuit current of short duration [kA]	6
<b>DC parameters</b>	
Rated power [kW]	3*30
Voltage range [V]	150-750
Rated/Max electric current [A]	±72 / ±90
Voltage and current measurement accuracy [%]	±1
Current / Voltage limiting characteristic	yes
<b>Energy Storage</b>	
Efficiency [%]	95
System rated voltage [V]	736
Charge/discharge system voltage range [V]	680 ~ 828
Rated/usable capacity [kWh]	109 / 98
Depth of discharge DOD [%]	90% (8 - 98% SOC)
<b>Ambient conditions</b>	
Working temperature range [°C]	0 ~ 50 (derating above 45°C)
Working humidity range [RH%]	<95 (without condensation)
Storage temperature range [°C]	-20 ~ +60
Storage humidity range [RH%]	0 ~ 95 (without condensation)
PCS cooling	Forced convection (fan with smart regulation to reduce consumption and noise)
System cooling	Air cooled monoblock unit
Altitude	<3000
<b>Communication</b>	
Communication interfaces	RS485, LAN, WAN,CAN, ModBus RTU, TCP/IP
<b>Safety</b>	
Degree protection	IP54
EMC features	2014/35/CE Low Voltage Directive - 2014/30/CE Electromagnetic compatibility
MTBF [h]	100000
Compliance with connection standards	CEI 0-21, CEI 0-16
Warranty [years]	2 (electrical / electronical parts) 10 or 6000 cycles (batteries)
Design Life [years]	15+
LFP Batteries transport certificate	UN38.3 / ADR
(*) Sound pressure level referred to a 2m distance from the device and air conditioning unit running at full speed.	
<b>BATTERY MODULE</b>	
<b>HM5A180F</b>	
Charge/discharge setting	0.5C
System charge/discharge voltage range [V]	150 / 750
Nominal capacity [kWh]	220
Maximum power [kW]	99
Maximum apparent power [kVA]	99