**EnergyCell** Nano-Carbon High Capacity

48V Partial State of Charge (PSoC) Energy Storage Technology



- Safe, maintenance-free valve regulated Absorbent Glass Mat (AGM) technology
- > Up to 44% improved cycle life in PSoC applications
- Space-saving steel module racking and horizontal cell orientation design
- > 3 year full replacement warranty
- Designed for large residential or commercial selfconsumption applications

## The EnergyCell Nano-Carbon High Capacity battery line provides an ideal solution for larger applications where limited sun hours are available for proper recharging of standard deep cycle batteries.

The Nano-Carbon is an enhanced and optimized negative active material formulation which makes it more than just a carbon additive. The high surface area carbon is a specially formulated additive for improving the negative active material in lead-acid batteries. Carbon increases conductivity and adds additional capacitance to the battery.

Nano-Carbon improves charge efficiency and allows PSoC operation with improved deep discharge recovery.

The included pre-assembled steel racking system allows for ease of installation with a small footprint and front access to all cell connections.

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# EnergyCell Nano-Carbon High Capacity Specifications

Models:	EnergyCell 1100NC	EnergyCell 1600NC	EnergyCell 2000NC	EnergyCell 2200NC
Technology	VRLA-AGM Carbon	VRLA-AGM Carbon	VRLA-AGM Carbon	VRLA-AGM Carbon
Cell Voltage	2V	2V	2V	2V
48V Cell Configuration	4x6	4x6	4x6	4хб
Cycle Life (50% DOD 1.75VPC)	2000	2000	2000	2000
Ah Capacity	<b>C/24 1.75VPC</b> : 926 <b>C/100 1.75VPC</b> : 1060	C/24 1.75VPC: 1392 C/100 1.75VPC: 1600	<b>C/24 1.75VPC</b> : 1740 <b>C/100 1.75VPC</b> : 1990	C/24 1.75VPC: 1855 C/100 1.75VPC: 2130
Short Circuit Current (A)	4240	6359	7949	8479
Maximum Charge Current (A)	397	595	744	794
Internal Resistance (m0hm)	0.4718	0.3145	0.2516	0.2359
Storage per Cell (kWh)	<b>C/24</b> : 1.85 <b>C/100</b> : 2.12	<b>C/24</b> : 2.78 <b>C/100</b> : 3.20	<b>C/24</b> : 3.48 <b>C/100</b> : 3.98	<b>C/24</b> : 3.71 <b>C/100</b> : 4.26
Dimensions L x W x H (in/mm)	26.38 x 28.25 x 45.78 / 670 x 718 x 1163	26.38 x 28.25 x 63.78 / 670 x 718 x 1620	26.38 x 28.25 x 77.28 / 670 x 718 x 1963	26.38 x 28.25 x 81.78 / 670 x 718 x 2077
Weight (lb/kg)	3220 / 1461	4420 / 2205	5365 / 2434	5740 / 2604
Operating Temperature Range (°F/°C)	-40 to 140 / -40 to 60	-40 to 140 / -40 to 60	-40 to 140 / -40 to 60	-40 to 140 / -40 to 60
Shelf Life (@ 25 °C)	12 months	12 months	12 months	12 months
Warranty	3 years	3 years	3 years	3 years

## 48V Ampere Hour Capacity to 1.75 Volts Per Cell at 77°F (25°C)

Discharge in Hours:	1	2	3	4	8	10	12	20	24	48	100
EnergyCell 1100NC	391.1	543.0	621.0	674.0	794.4	829.0	854.4	918.0	926.4	998.4	1060.0
EnergyCell 1600NC	586.7	814.6	931.8	1011.6	1191.2	1243.0	1282.8	1376.0	1392.0	1497.6	1600.0
EnergyCell 2000NC	733.4	1018.2	1164.6	1264.4	1489.6	1554.0	1603.2	1720.0	1740.0	1872.0	1990.0
EnergyCell 2200NC	782.3	1086.2	1242.3	1348.8	1588.8	1658.0	1710.0	1834.0	1855.2	1996.8	2130.0



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