

Partial Charge Carbon Solar Battery PCC-200



Nominal Voltage DC	12V (6 cells)
Cycle Life @ 50% DOD	2800 (7+ years, 12 years On Grid)
Amp Hour Capacity (to 10.5V)	200Ah @ 100hr, 178Ah @ 20hr, 168Ah @ 12hr
Operating Temperature	Discharge: -40F (-40C) to +160F (71C) Charge: -10F (-23C) to +140F (60C) Optimal: +68F (20C) to +80F (27C)
Max Charge Current	50A
Float Voltage (77F/25C)	13.6V
Absorb Voltage (77F/25C)	14.4V (1 hour)
PSoC Equalization Voltage (77F/25C)	14.7V (2 hours) every 30 days if PSoC usage
Optimal Partial PSoC	30-80% SoC
Internal Resistance	Approx 3mOhm
Self Discharge	Can be stored for 6 months @ 77F (25C) before fresh-ening charge suggested.
Temp-Compensation	5mV/C per cell
Weight	131 lb / 60kg
Dimensions H x D x W	12.6 x 22 x 4.95in (320 x 559 x 126mm)
Warranty	3 years
Terminal Hardware	1/4-20 UNC Bolt 110 in-lbs (12.4 N-m)
Accessories	Interconnect bar & terminal covers

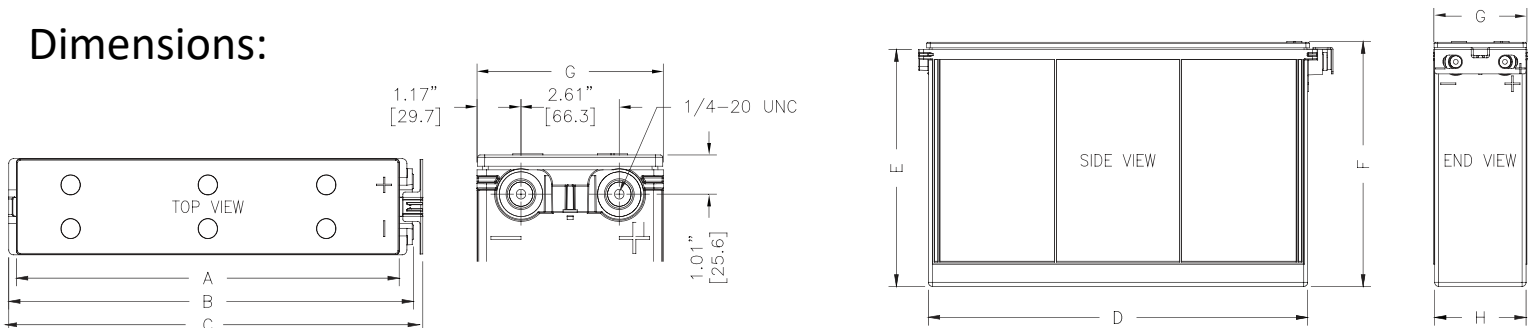
Applications

- Battery Backup
- Off Grid
- Time of Use
- Self Consumption
- Grid Zeroing

Key Features

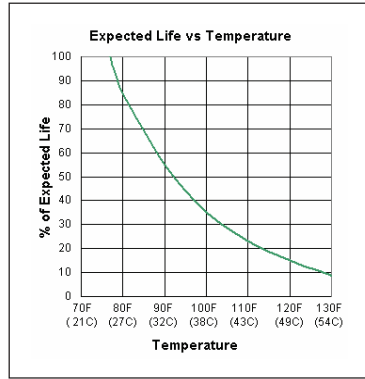
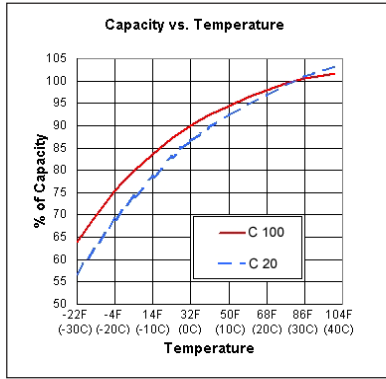
- High Energy Efficiency: 98%
- Low Internal Resistance: 3mOhm
- Low-Self Discharge
- Long PSoC Cycle Life: 2800
- High Rate Discharge
- 3yr Warranty
- No Watering Required

Dimensions:

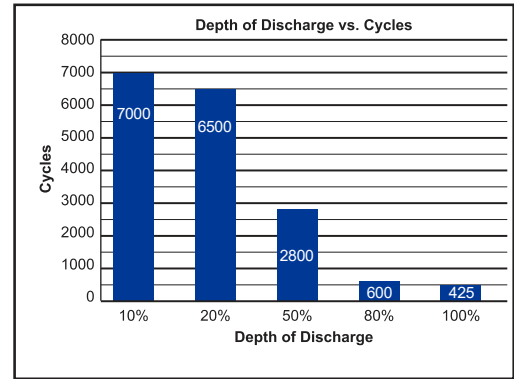


A		B		C		D	
in	mm	in	mm	in	mm	in	mm
20.35	516.86	21.51	546.25	22.01	559.05	12.6	512.17
E		F		G		H	
in	mm	in	mm	in	mm	in	mm
12.19	320.04	12.6	320.04	4.95	125.73	4.86	123.39

BATTERY CHARACTERISTICS



INDUSTRY LEADING CYCLE LIFE



Battery Chemistry Cost Comparison

	Standard AGM	Sol-Ark PCC AGM	Lithium NMC	Lithium LFP
10kWh Cost Range	\$1.6K to \$2.4K	\$2.5K to \$3.2K	\$5K to \$7K	\$8k to \$12K
10kWh Cost	\$ 1,800	\$ 2,500	\$ 6,000	\$ 9,000
Off Grid Cycles 50% DOD (Lab Conditions)	600	2800	4000	8000
Off-Grid Cycles 50% DOD (Real World)	500	2250	2400	4800 to 7200
Off Grid Years Typ (Real World)	1.4	6.2	6.6	13.2
On Grid Years Typ	7	12	12	14
Cost per Cycle	\$ 3.60	\$ 1.11	\$ 2.50	\$ 1.88
Round Trip Efficiency	88%	98%	98%	98%
Benefits	Lowest cost UPS backup	Lowest cost/cycle, partial SOC, efficiency	Small size, Partial SOC, efficiency, high charge rates	Small size, Partial SOC, efficiency, high charge rates
Drawbacks	Size, cycles, partial SOC sulfates, >95F reduces cycle count 2x	Size, >95F reduces cycle count 2x	<32F reduces cycles 5x, 95F reduces cycle count 2x, BMS reliability	<32F reduces cycles 5x, 95F reduces cycle count 2x, BMS reliability

Cost per Cycle

