

Switch to Lead Carbon Batteries

Maintenance Free, Designed for Partial State of Charge



SWE6-420

**2800 cycles @50%
Depth of Discharge**

PSOC Application :

- Off-Grid Cabins, Homes & Grid-Tie Battery Back-up
- AGM and Flooded L16 Replacement

Features:

- Specifically Designed for Partial State of Charge Applications
- 2800 cycles @50% Depth of Discharge
- Precision Sealing Technology
- Suitable for Cold Temperature Usage
- 98% Recyclability



www.switchenergy.ca

Specifications

Nominal Voltage: 6V

Nominal Capacity: 420Ah(20hr)

Weight: 56.8kg(125lbs)

Dimensions: 29.5×18×42cm(12×7.1×16.5")

L16 Replacement

Max. Charge Current: 105A

Recommended Charge Current: 42A

Float Charge: 6.75V

Absorp. Charge: 7.2V

Charging Based on 25°C

Temp. Coefficient :

-3mv/cell/°C & -18mv/°C/battery

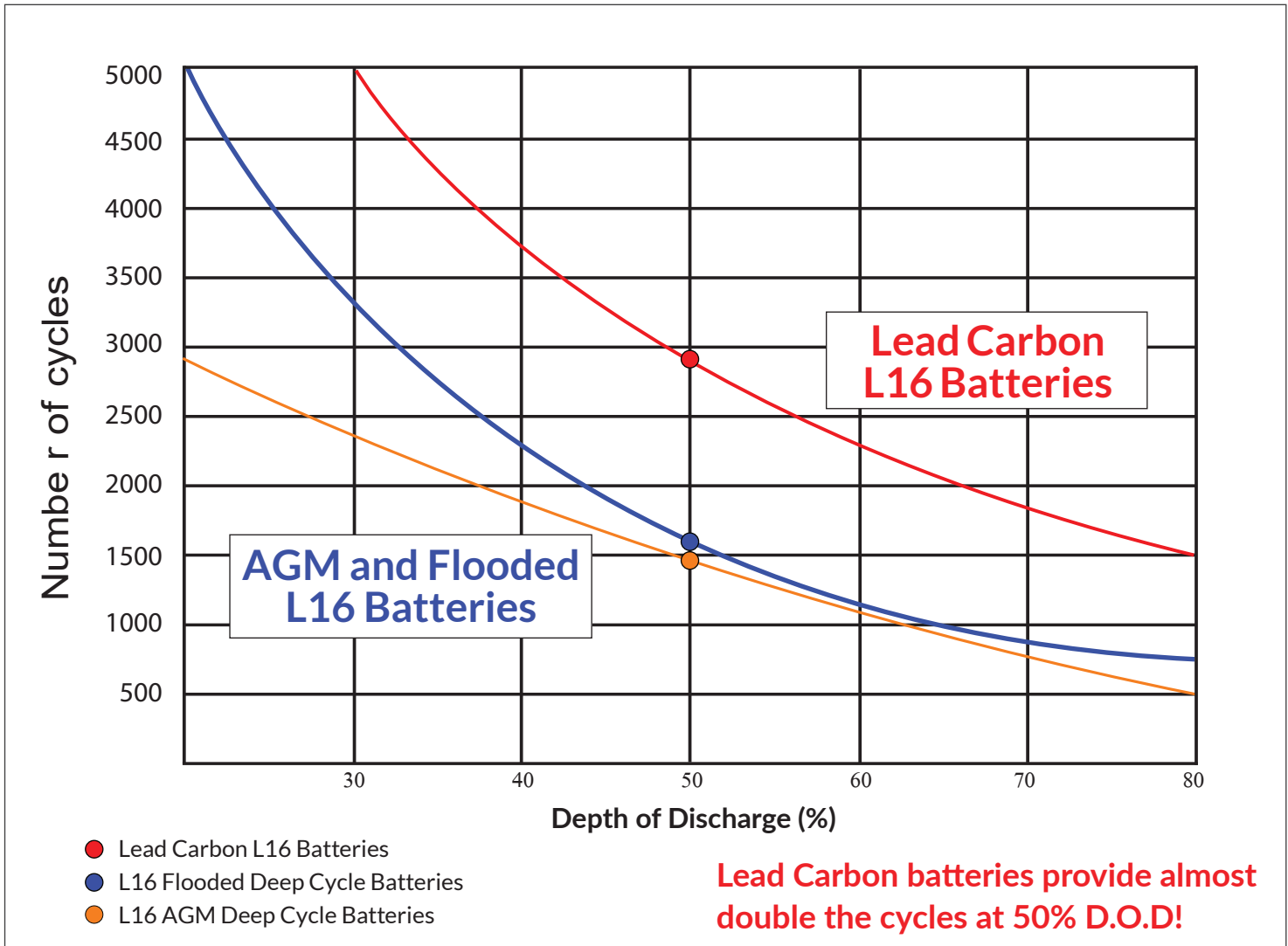
Operating Temperatures:

Charge: -20 - 50 °C

Storage: -20 - 50 °C

Discharge: -40 - 60 °C

SWE6-420 Lead Carbon Battery



Constant Current Discharge Characteristics Unit: A (25 °C, 77 °F)											
F.V/Time	15min	30min	45min	1h	2h	3h	5h	8h	10h	20h	100h
1.60V	551	351	259	238	151	106	72.2	47.6	41.6	22.7	5.04
1.65V	541	345	254	234	148	104	70.7	46.7	40.7	22.3	4.94
1.70V	531	338	250	229	145	102	69.4	45.8	40.1	21.8	4.85
1.75V	521	332	245	225	143	100	68.1	45.0	39.3	21.4	4.75
1.80V	501	319	236	216	137	96.4	65.5	43.3	37.8	21.0	4.66

Constant Power Discharge Characteristics Unit: W/cell (25 °C, 77 °F)											
F.V/Time	15min	30min	45min	1h	2h	3h	5h	8h	10h	20h	100h
1.60V	1061	676	499	458	291	204	139	91.7	80.0	43.7	9.70
1.65V	1042	664	490	450	286	200	136	90.0	78.5	42.8	9.51
1.70V	1023	651	481	441	280	197	134	88.3	77.1	42.0	9.32
1.75V	1004	639	472	433	275	193	131	86.5	75.6	41.2	9.16
1.80V	965	614	454	416	264	185	126	83.3	72.9	40.5	8.97

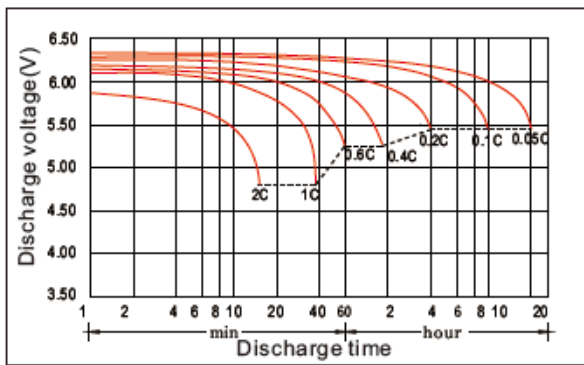


Rated Capacity

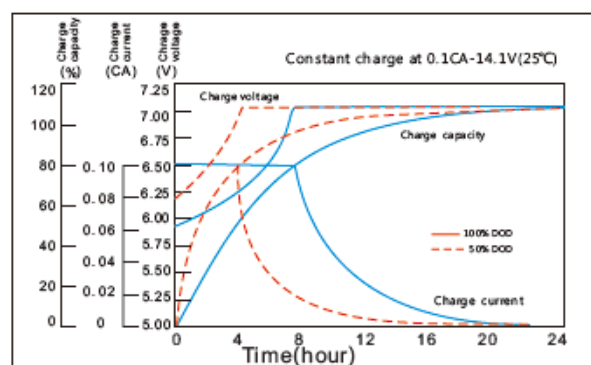
- 420Ah 20Hour Rate (21.0A to 5.40V)
- 380Ah 10Hour Rate (38.0A to 5.40V)
- 330Ah 5Hour Rate (66.0A to 5.40V)
- 225Ah 1Hour Rate (225A to 5.25V)

Internal resistance	Full charged at 25°C: 1.90 mΩ
Max. Discharge Current	4200A(5S)
Operating Temperature	Discharge: -20 ~50°C (-4~ 122°F)
	Charge -20 ~50°C (-4~ 122°F)
	Storage -20 ~50°C (-4~ 122°F)

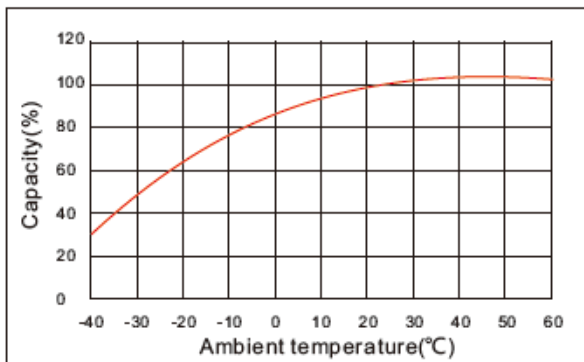
Discharge characteristic



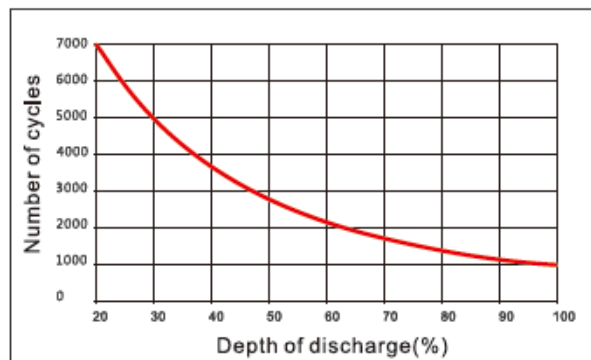
Charging characteristic



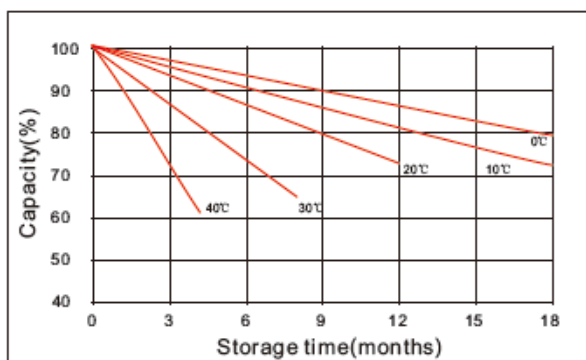
The effect of temperature on capacity



The effect of discharge depth on cycle life



Curves of self-discharge



The effect of temperature on float life

