



S4,5

4.5 Ah | 6 V | 20 h

Specifications

Voltage	6 V
Nominal Capacity	4.5 Ah @ 20 hour-rate
Number of Cells	3
Internal Resistance	Approx. 27 mΩ
Design Life	6 to 8 years (float charging)
Short Circuit Current	234 A
Self Discharge	Monthly rate < 3% @ 25 °C Recharge after 6 months Charge before using

Temperature Ranges

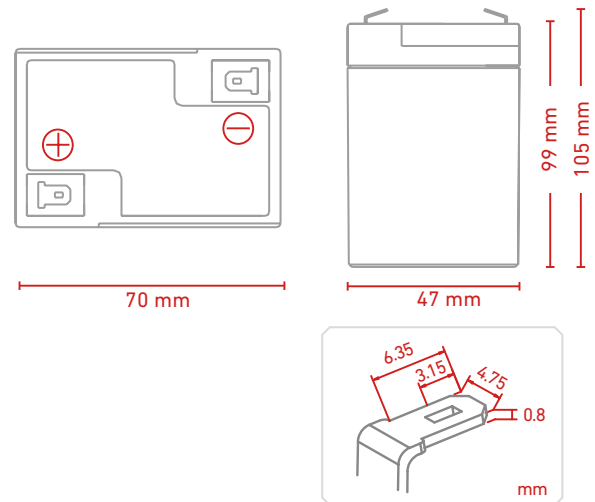
Normal Operation	25 °C ± 5 °C
Discharging	-20 °C to 60 °C
Charging	0 °C to 50 °C
Storage	-20 °C to 60 °C

Mechanical Specifications

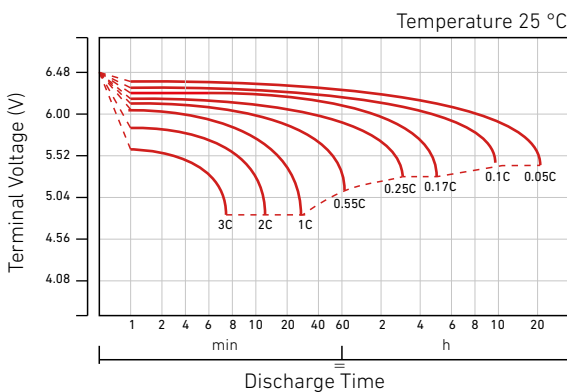
Measurements (L x W x H)	70 x 47 x 101 mm
Weight	Approx. 0.65 kg
Terminals	F1
Case material	A.B.S. UL94-HB, UL94-V0 Optional

Charging & Discharging

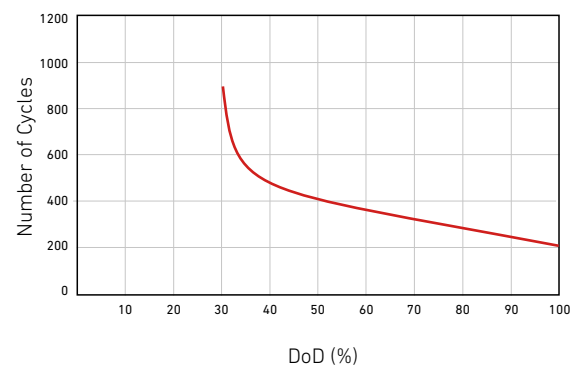
Max. Charging Current	1.35 A
Max. Discharge Current	45 A (5 sec)
Standby Use Voltage	6.85 V to 6.94 V @ 25 °C Temperature Compensation: -3mV/°C/Cell
Cycle Use Voltage	7.30 V to 7.40 V @ 25 °C Temperature Compensation: -4mV/°C/Cell
Reference Capacity	C3 3.5 Ah C5 3.9 Ah C10 4.2 Ah C20 4.5 Ah



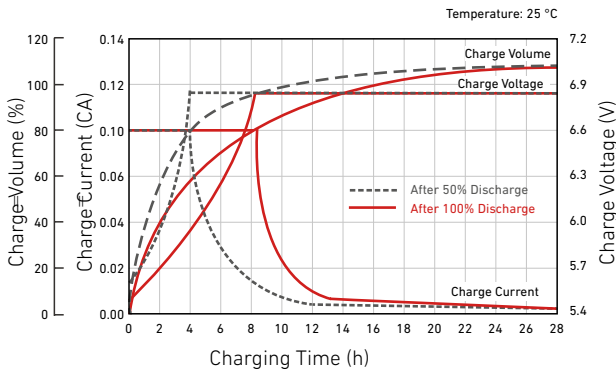
Discharge Characteristics Curve



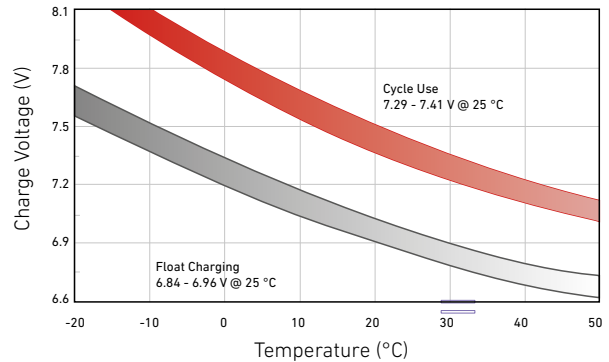
Cycle Life in Relation to Depth of Discharge



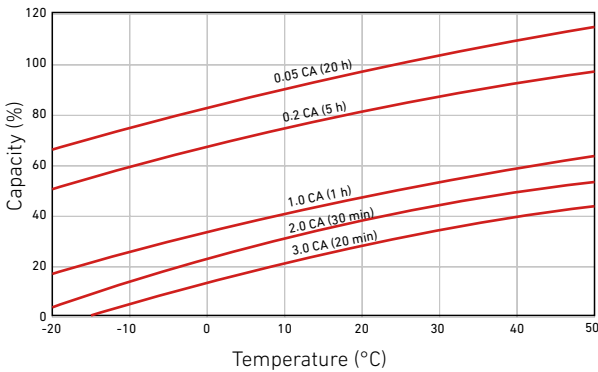
Discharge Characteristics Curve For Standby Use



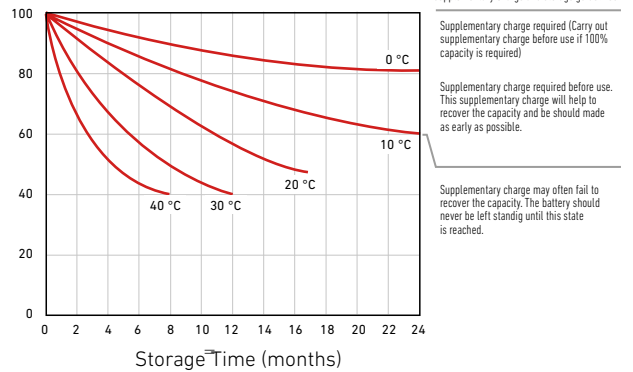
Relationship Between Charging Voltage and Temperature



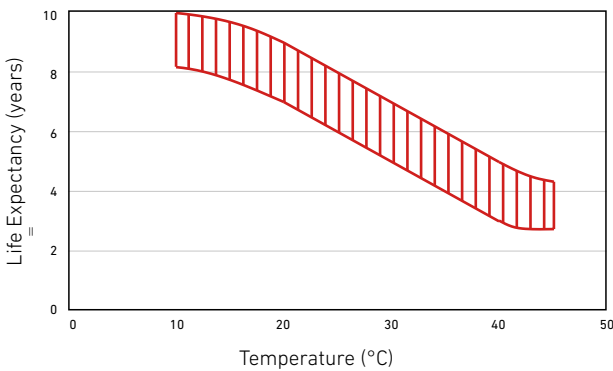
Temperature Effects on Capacity



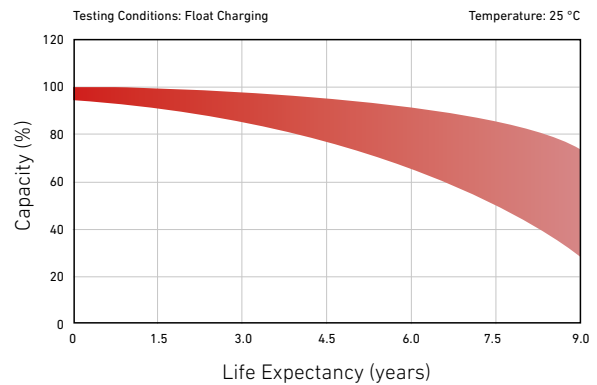
Storage Characteristics



Effect of Temperature on Long-Term Life



Life Characteristics of Standby Use



Constant Current Discharge Characteristics: A (25 °C)

F.V	Time											
	5 min	10 min	15 min	30 min	1 h	2 h	3 h	4 h	5 h	8 h	10 h	20 h
1.60 V	17,84	11,64	8,584	4,968	2,870	1,694	1,231	0,980	0,828	0,553	0,450	0,234
1.65 V	17,20	11,29	8,359	4,859	2,817	1,669	1,215	0,968	0,818	0,547	0,446	0,232
1.70 V	16,36	10,83	8,063	4,714	2,747	1,636	1,193	0,952	0,805	0,540	0,440	0,230
1.75 V	15,28	10,25	7,678	4,526	2,654	1,592	1,164	0,930	0,788	0,530	0,433	0,227
1.80 V	13,92	9,494	7,183	4,281	2,533	1,535	1,126	0,902	0,766	0,517	0,423	0,222
1.85 V	12,25	8,553	6,558	3,968	2,378	1,460	1,076	0,865	0,737	0,500	0,409	0,216

Constant Power Discharge Characteristics: WPC (25 °C)

F.V	Time											
	5 min	10 min	15 min	30 min	1 h	2 h	3 h	4 h	5 h	8 h	10 h	20 h
1.60 V	30,71	20,08	15,23	9,16	5,45	3,26	2,39	1,91	1,62	1,10	0,90	0,47
1.65 V	30,39	19,99	15,14	9,09	5,40	3,23	2,37	1,90	1,61	1,09	0,89	0,47
1.70 V	29,23	19,40	14,74	8,87	5,29	3,18	2,33	1,87	1,59	1,08	0,88	0,46
1.75 V	27,79	18,68	14,24	8,60	5,13	3,11	2,29	1,83	1,56	1,06	0,87	0,45
1.80 V	25,76	17,61	13,51	8,22	4,92	3,01	2,22	1,78	1,52	1,03	0,85	0,45
1.85 V	23,08	16,15	12,51	7,70	4,65	2,88	2,13	1,72	1,47	1,00	0,82	0,44