



T85

CARBON

85 Ah | 12 V | 100 h

Specifications

Voltage	12 V
Nominal Capacity	85 Ah @ 100 hour-rate
Number of Cells	6
Internal Resistance	Approx. 6.6 mΩ
Design Life	15 years (floating charge)
Self Discharge	Monthly rate < 4% @ 25 °C Recharge after 6 months Charge before using

Charging & Discharging

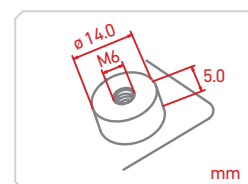
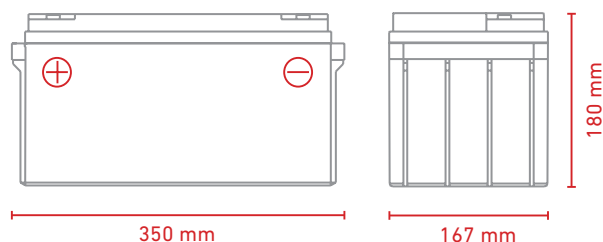
Max. Charging Current	24.0 A
Max. Discharge Current	800 A (5 sec)
Cycle Use Voltage	13.8 V to 14.0 V @ 25 °C Temperature Compensation: -3mV/°C/Cell
Reference Capacity	C3 57 Ah C5 65 Ah C10 71 Ah C20 80 Ah C100 85 Ah

Temperature Ranges

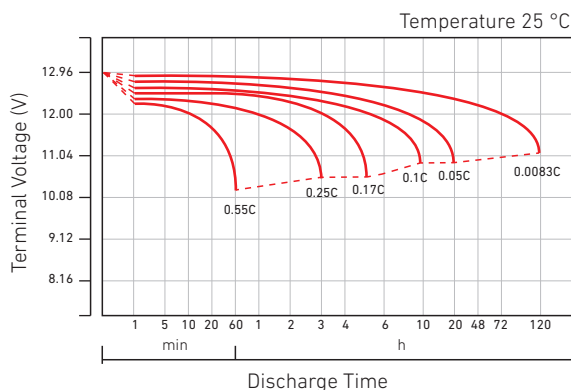
Normal Operation	25 °C ± 5 °C
Discharging	-20 °C to 60 °C
Charging	0 °C to 50 °C
Storage	-20 °C to 60 °C

Mechanical Specifications

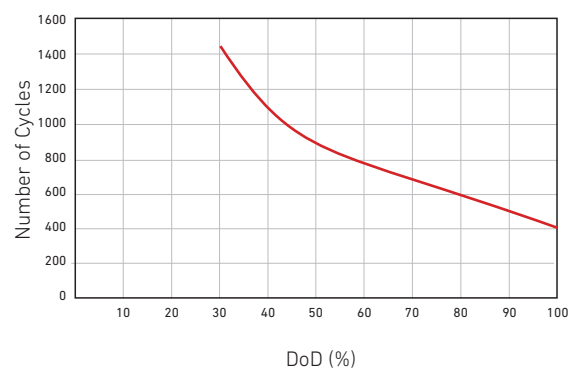
Measurements (L x W x H)	350 x 167 x 180 mm
Weight	Approx. 23.5 kg
Terminals	F11 (M6)
Case material	A.B.S. UL94-HB, UL94-V0



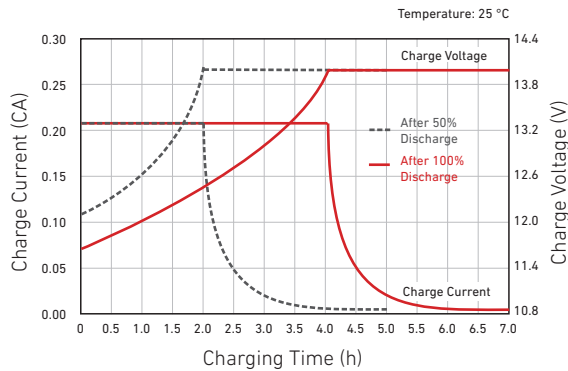
Discharge Characteristics Curve



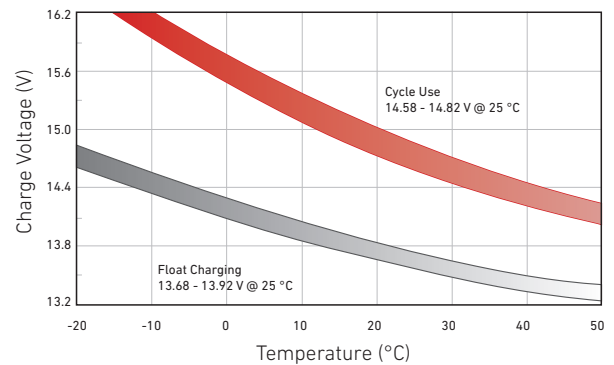
Cycle Life in Relation to Depth of Discharge



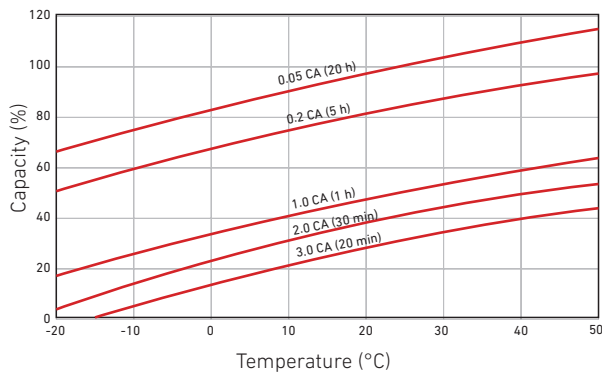
Charge Characteristics Curve For Cycle Use (IU)



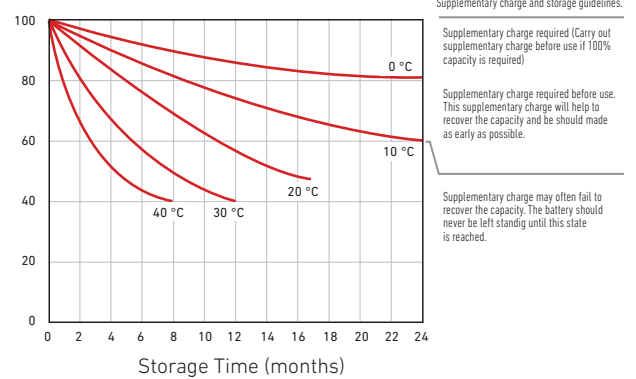
Relationship Between Charging Voltage and Temperature



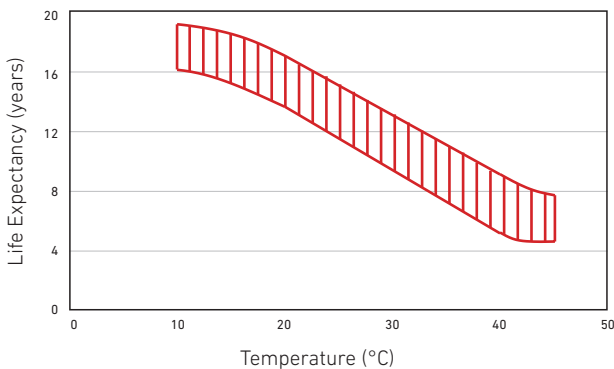
Temperature Effects on Capacity



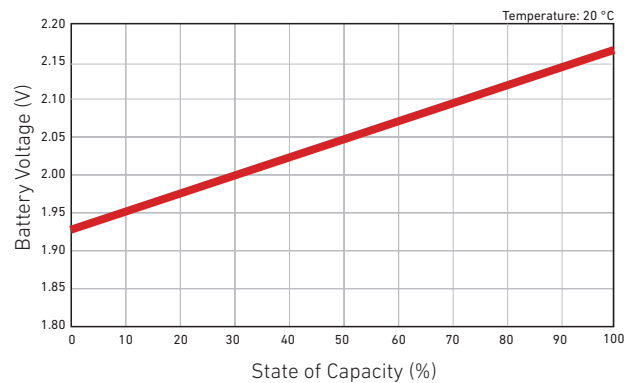
Storage Characteristics



Effect of Temperature on Long-Term Life



Relationship of OCV and State of Charge



Constant Current Discharge Characteristics: A (25 °C)

	Time											
F.V	1 h	2 h	3 h	4 h	5 h	8 h	10 h	20 h	48 h	72 h	100 h	120 h
1.60 V	44,4	25,98	19,34	15,32	12,91	8,81	7,73	4,18	1,79	1,22	0,90	0,77
1.65 V	43,5	25,54	19,05	15,11	12,75	8,71	7,65	4,13	1,77	1,21	0,89	0,76
1.70 V	42,4	24,96	18,65	14,83	12,54	8,58	7,55	4,08	1,75	1,19	0,88	0,75
1.75 V	40,9	24,15	18,11	14,44	12,24	8,40	7,40	4,00	1,71	1,17	0,86	0,73
1.80 V	38,8	23,04	17,36	13,90	11,83	8,15	7,20	3,89	1,67	1,14	0,84	0,71
1.85 V	35,8	21,46	16,29	13,13	11,24	7,78	6,91	3,73	1,60	1,09	0,80	0,69

Constant Power Discharge Characteristics: WPC (25 °C)

	Time											
F.V	1 h	2 h	3 h	4 h	5 h	8 h	10 h	20 h	48 h	72 h	100 h	120 h
1.60 V	83,0	49,25	36,94	29,41	24,88	17,21	15,19	8,21	3,51	2,41	1,77	1,51
1.65 V	82,3	48,76	36,60	29,16	24,70	17,07	15,07	8,14	3,48	2,39	1,76	1,49
1.70 V	80,4	47,79	35,93	28,68	24,34	16,83	14,87	8,04	3,44	2,36	1,73	1,48
1.75 V	78,0	46,47	35,04	28,04	23,85	16,51	14,61	7,89	3,38	2,31	1,70	1,45
1.80 V	74,3	44,56	33,73	27,09	23,13	16,05	14,23	7,69	3,29	2,25	1,66	1,41
1.85 V	69,1	41,71	31,78	25,68	22,05	15,36	13,67	7,39	3,16	2,17	1,59	1,36