



S280

280 Ah | 12 V | 20 h

Specifications

Voltage	12 V
Nominal Capacity	280 Ah @ 20 hour-rate
Number of Cells	6
Internal Resistance	Approx. 2.6 mΩ
Design Life	12 years (float charging)
Short Circuit Current	4810 A
Self Discharge	Monthly rate < 3% @ 25 °C Recharge after 6 months Charge before using

Temperature Ranges

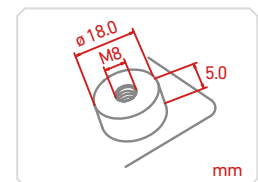
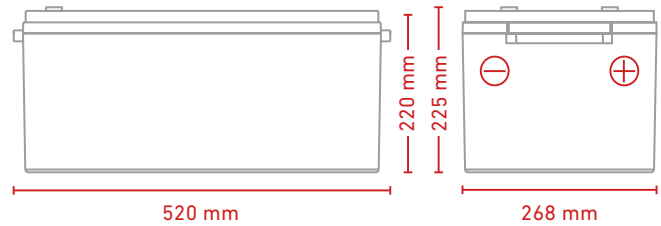
Normal Operation	25 °C ± 5 °C
Discharging	-20 °C to 60 °C
Charging	0 °C to 50 °C
Storage	-20 °C to 60 °C

Charging & Discharging

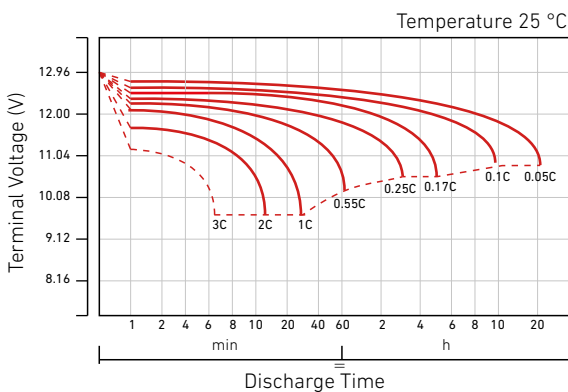
Max. Charging Current	78.0 A
Max. Discharge Current	2600 A (5 sec)
Standby Use Voltage	13.6 V to 13.8 V @ 25 °C Temperature Compensation: -3mV/°C/Cell
Cycle Use Voltage	14.6 V to 14.8 V @ 25 °C Temperature Compensation: -4mV/°C/Cell
Reference Capacity	C3 201 Ah C5 227 Ah C10 260 Ah C20 280 Ah

Mechanical Specifications

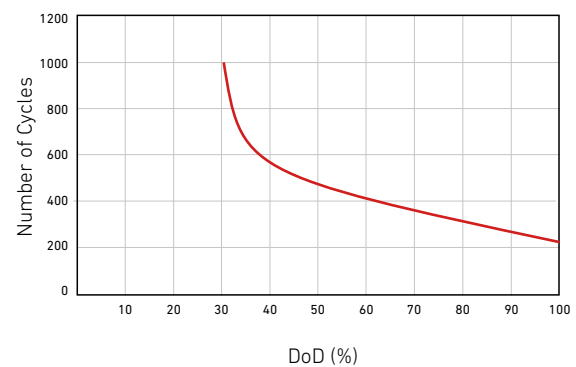
Measurements (L x W x H)	520 x 268 x 220 mm
Weight	Approx. 72.0 kg
Terminals	F14 (M8)
Case material	A.B.S. UL94-HB, UL94-V0 Optional



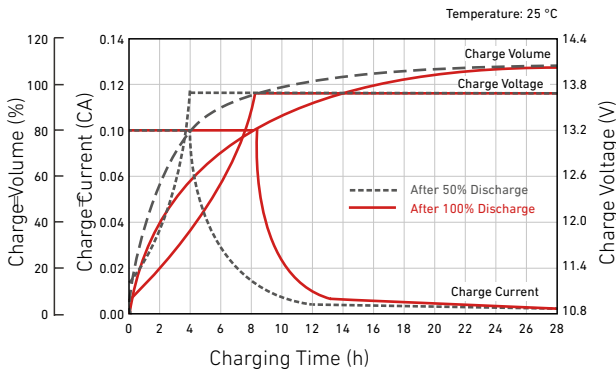
Discharge Characteristics Curve



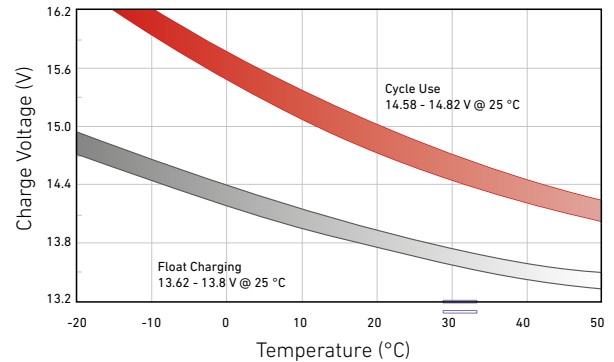
Cycle Life in Relation to Depth of Discharge



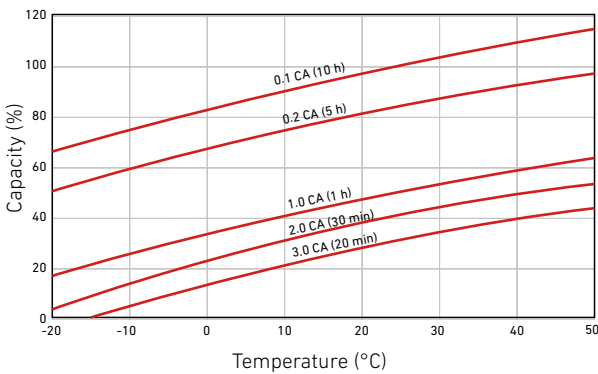
Discharge Characteristics Curve For Standby Use



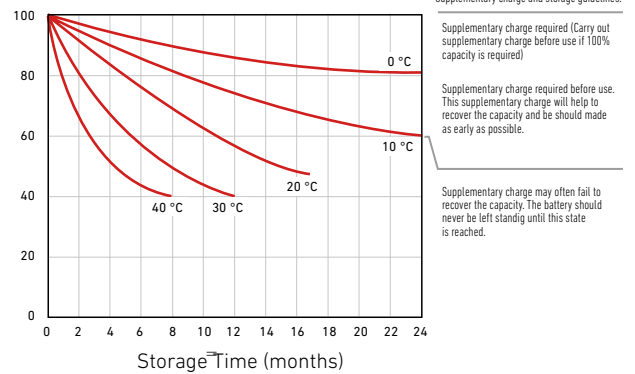
Relationship Between Charging Voltage and Temperature



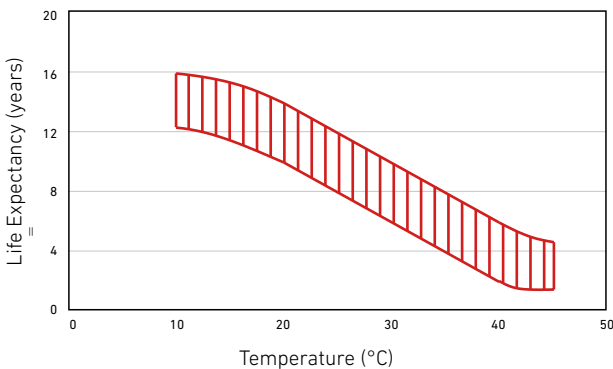
Temperature Effects on Capacity



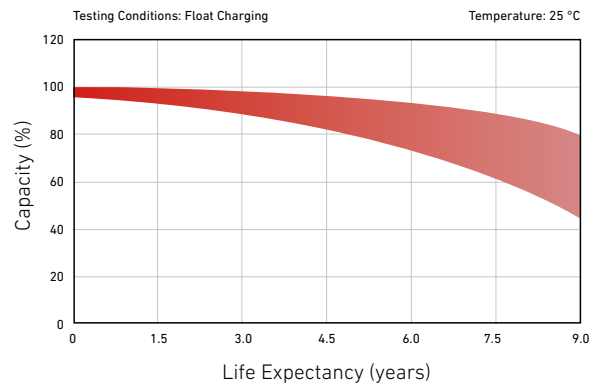
Storage Characteristics



Effect of Temperature on Long-Term Life



Life Characteristics of Standby Use



Constant Current Discharge Characteristics: A (25 °C)

	Time									
	15 min	30 min	1 h	2 h	3 h	4 h	5 h	8 h	10 h	20 h
1.60 V	445,90	281,88	158,86	94,65	73,33	57,64	49,05	32,96	27,43	14,35
1.65 V	426,30	270,61	153,41	91,63	71,07	56,08	47,78	32,60	27,09	14,12
1.70 V	399,28	258,66	148,42	88,61	69,14	54,55	46,54	32,09	26,69	13,95
1.75 V	371,56	247,22	143,00	85,51	67,08	53,15	45,37	31,65	26,34	13,78
1.80 V	343,09	236,29	137,53	82,45	65,00	51,63	44,20	31,11	26,00	13,64
1.85 V	284,70	203,51	123,35	75,54	60,09	47,99	41,21	29,21	24,47	12,95

Constant Power Discharge Characteristics: WPC (25 °C)

	Time									
	15 min	30 min	1 h	2 h	3 h	4 h	5 h	8 h	10 h	20 h
1.60 V	779,52	511,97	298,52	179,38	140,07	110,65	94,55	64,38	53,92	28,25
1.65 V	756,30	496,68	289,94	174,50	136,31	108,06	92,44	63,79	53,34	27,85
1.70 V	718,95	479,50	282,27	169,68	133,20	105,52	90,35	62,95	52,60	27,54
1.75 V	678,76	463,02	273,59	164,51	129,77	103,21	88,38	62,20	51,97	27,24
1.80 V	635,61	447,02	264,66	159,42	126,25	100,60	86,41	61,28	51,37	27,00
1.85 V	534,92	388,83	238,83	146,87	117,24	93,86	80,85	57,66	48,43	25,67