



T300

300 Ah | 12 V | 100 h

Specifications

Voltage	12 V
Nominal Capacity	300 Ah @ 100 hour-rate
Number of Cells	6
Internal Resistance	Approx. 4.0 mΩ
Design Life	15 years (floating charge)
Self Discharge	Monthly rate < 3% @ 25 °C Recharge after 6 months Charge before using

Temperature Ranges

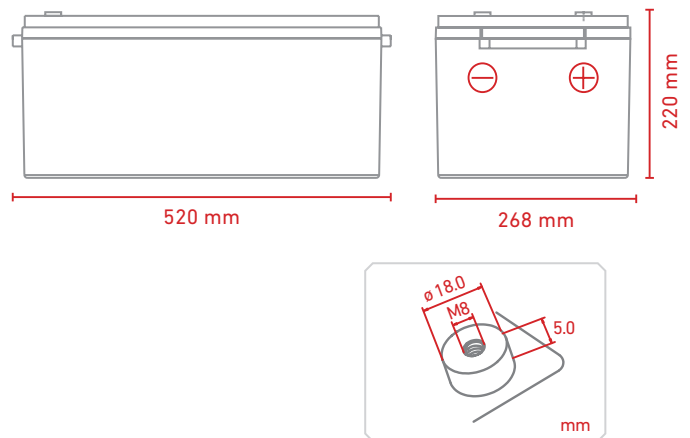
Normal Operation	25 °C ± 5 °C
Discharging	-40 °C to 60 °C
Charging	-20 °C to 50 °C
Storage	-40 °C to 60 °C

Charging & Discharging

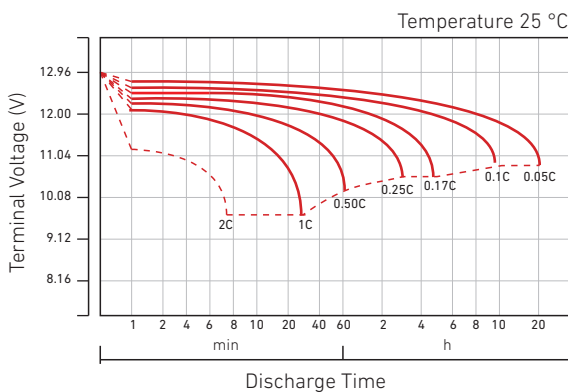
Max. Charging Current	52.0 A
Max. Discharge Current	2600 A (5 sec)
Float Charging Voltage	13.6 V to 13.8 V @ 25 °C Temperature Compensation: -3mV/°C/Cell
Cycle Use Voltage	14.2 V to 14.4 V @ 25 °C Temperature Compensation: -4mV/°C/Cell
Reference Capacity	C3 178 Ah C5 200 Ah C10 230 Ah C20 264 Ah C100 300 Ah

Mechanical Specifications

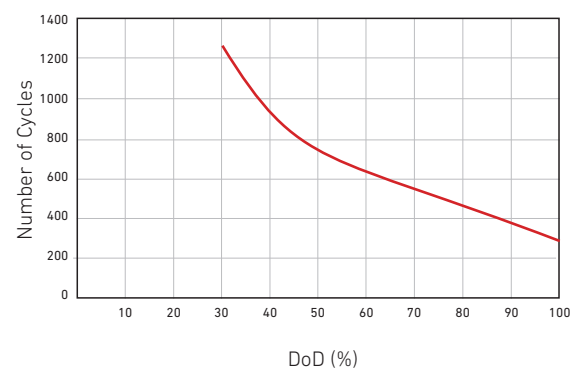
Measurements (L x W x H)	520 x 268 x 220 mm
Weight	Approx. 71.0 kg
Terminals	F14 (M8)
Case material	A.B.S. UL94-HB, UL94-V0 Optional



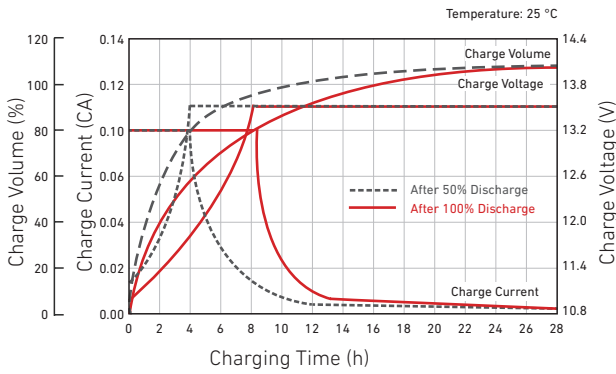
Discharge Characteristics Curve



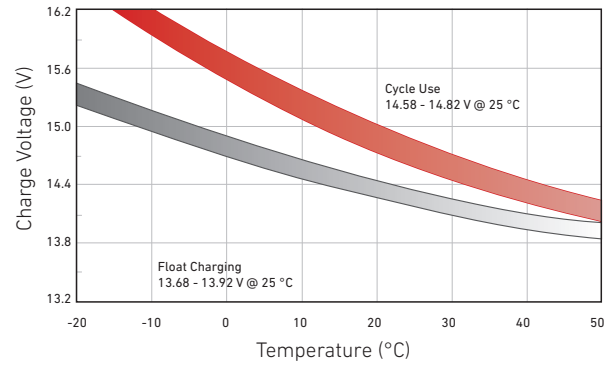
Cycle Life in Relation to Depth of Discharge



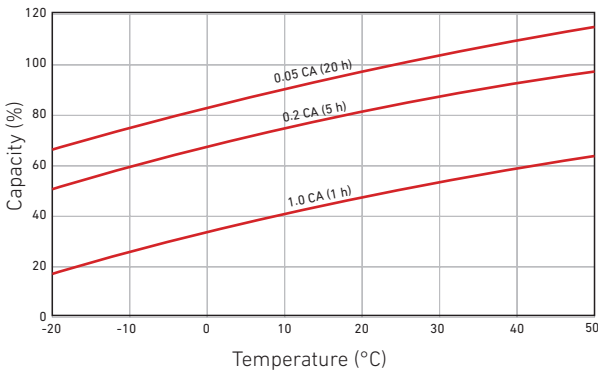
Charge Characteristics Curve For Cycle Use (IU)



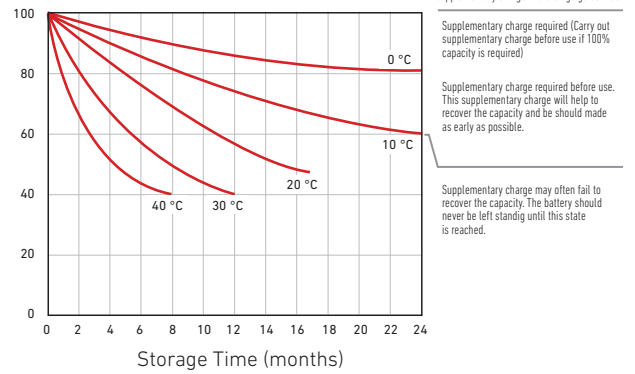
Relationship Between Charging Voltage and Temperature



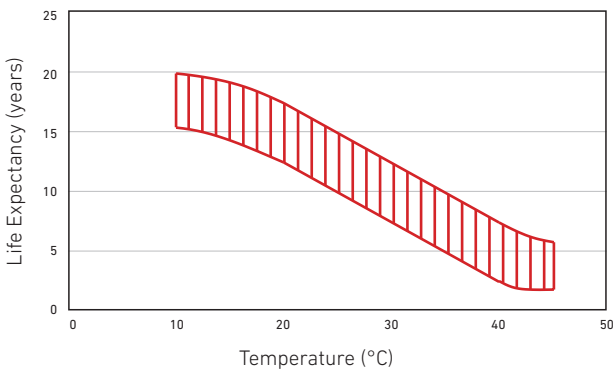
Temperature Effects on Capacity



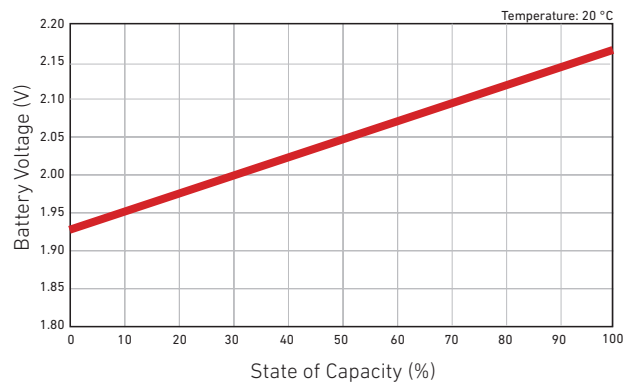
Storage Characteristics



Effect of Temperature on Long-Term Life



Relationship of OCV and State of Charge



Constant Current Discharge Characteristics: A (25 °C)

F.V	Time										
	15 min	30 min	1 h	2 h	3 h	4 h	5 h	8 h	10 h	20 h	100 h
1.60 V	355,7	238,4	145,3	87,0	60,1	49,3	40,3	27,8	23,5	14,3	3,08
1.65 V	348,4	236,3	144,7	86,3	59,9	49,0	40,1	27,5	23,3	13,8	2,97
1.70 V	343,0	234,9	143,3	85,7	59,4	48,8	39,8	27,3	23,0	13,4	2,89
1.75 V	330,4	231,2	142,0	85,0	59,2	48,4	39,4	27,1	22,8	13,0	2,80
1.80 V	308,1	223,2	138,6	83,5	57,6	47,2	38,7	26,6	22,6	12,2	2,63
1.85 V	279,5	211,1	131,7	79,8	55,0	44,9	37,0	25,5	21,9	11,7	2,52

Constant Power Discharge Characteristics: WPC (25 °C)

F.V	Time										
	15 min	30 min	1 h	2 h	3 h	4 h	5 h	8 h	10 h	20 h	100 h
1.60 V	652	453	280	171	119	97,9	80,2	55,3	46,8	25,3	5,45
1.65 V	642	448	279	170	119	97,7	80,0	55,0	46,5	24,8	5,36
1.70 V	634	449	277	169	119	97,5	79,7	54,6	46,1	24,4	5,26
1.75 V	612	443	275	168	118	96,6	78,7	54,2	45,6	23,9	5,16
1.80 V	573	429	270	166	115	94,4	77,3	53,3	45,2	23,5	5,06
1.85 V	521	406	258	159	110	89,9	74,0	51,0	43,8	22,1	4,76