

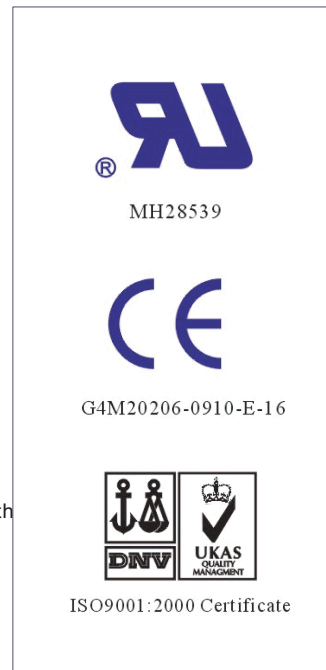
BTL 2-300 (2V300Ah)



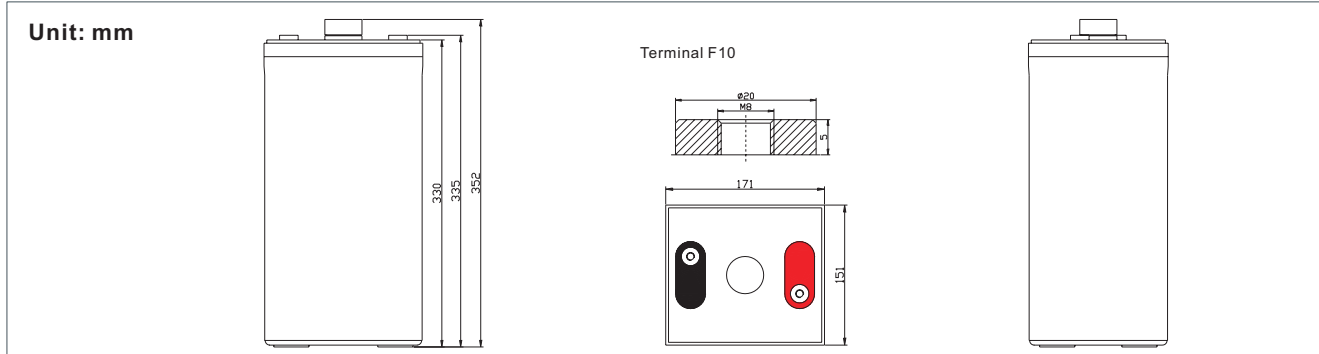
BTL 2-300 is a general purpose battery with 10-15 years expected life under normal float charge. As with all EFFEKTA batteries, all are rechargeable, highly efficient, leak proof and maintenance free.

Specification

Cells Per Unit	1
Voltage Per Unit	2
Capacity	300Ah@10hr-rate to 1.75V per cell @25°C
Weight	Approx. 21Kg
Max. Discharge Current	1500A(5sec)
Internal Resistance	Approx. 0.75mΩ
Operating Temperature Range	Discharge: -20°C~50°C Charge: 0°C~50°C Storage: -20°C~60°C
Normal Operating Temperature Range	25°C±5°C
Float charging Voltage	2.25 to 2.30 VDC/unit Average at 25°C
Recommended Maximum Charging Current Limit	75A
Equalization and Cycle Service	2.40 to 2.45 VDC/unit Average at 25°C
Self Discharge	EFFEKTA batteries can be stored for more than 6 months at 25°C. Please charge batteries before using. For higher temperature, the time interval will be shorter.
Terminal	Thread insert & Bolt (F10)
Container Material	A.B.S. (UL94-HB) Flammability resistance of UL94-V1 can be available upon request.



Dimensions



Constant Current Discharge Characteristics Unit: A(25°C)

F.V/Time	5MIN	10MIN	30MIN	1HR	2HR	3HR	5HR	10HR	12HR	24HR
1.60V	818	636	330	209	126	95.4	62.1	32.1	27.0	14.1
1.65V	727	588	321	206	123	92.4	59.1	32.0	27.0	14.1
1.70V	667	545	306	197	120	87.9	56.1	31.8	27.0	13.6
1.75V	614	504	297	192	114	82.9	55.8	31.7	26.7	13.6
1.80V	542	461	286	182	110	82.1	54.4	30.3	25.8	13.6
1.85V	400	358	233	150	100	75.8	49.7	28.6	24.5	13.3

Constant Power Discharge Characteristics Unit: W(25°C)

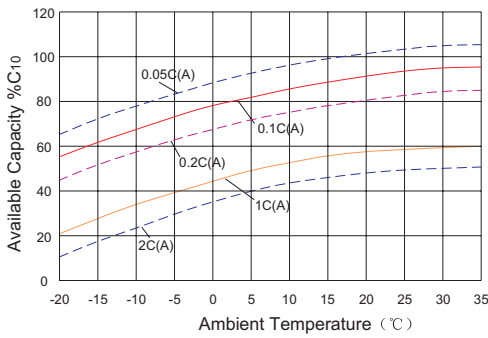
F.V/Time	5MIN	10MIN	30MIN	1HR	2HR	3HR	5HR	10HR	12HR	24HR
1.60V	1339	1081	618	393	242	174	115	62.7	52.9	27.5
1.65V	1240	1016	1042	385	233	171	112	62.7	52.9	27.5
1.70V	1158	942	562	373	225	165	110	60.4	50.6	27.2
1.75V	1069	900	544	364	220	159	108	60.1	50.6	27.2
1.80V	969	826	468	316	213	157	106	59.5	50.6	27.2
1.85V	743	666	456	293	193	146	96.6	55.9	48.3	25.7

All mentioned values are average values.

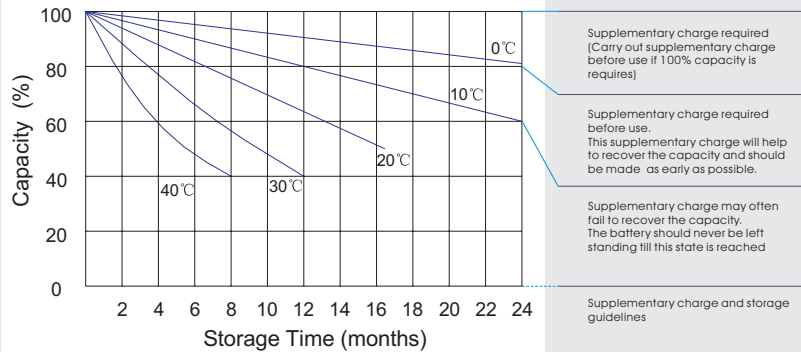
BTL 2-300

2V300Ah

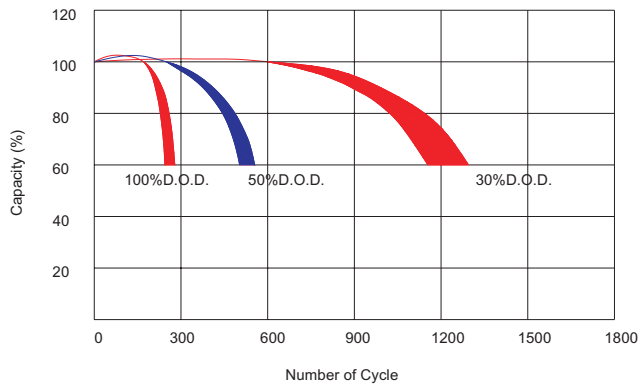
Temperature effects curve



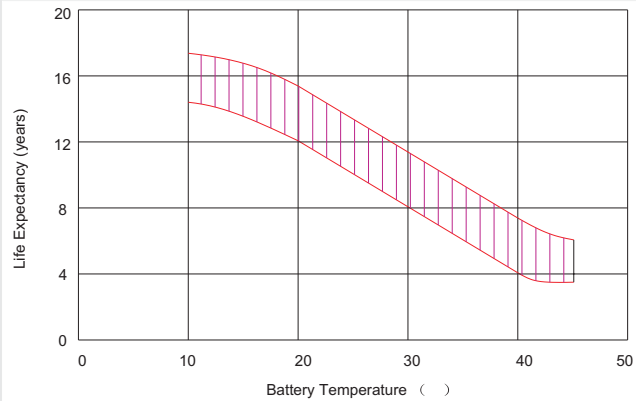
Storage characteristic



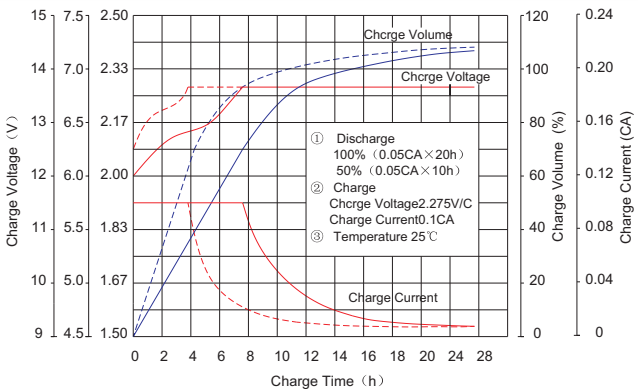
Life characteristics of cyclic use



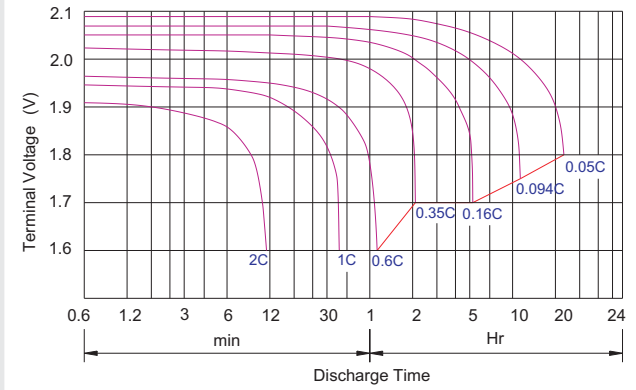
Effect of temperature on long term float life



Charge characteristic Curve for standby use



Discharge characteristic Curve



Charging Procedures(12V series)

Application	Charge Voltage (V)			Max. Charge Current
	Temperature	Set point	Allowable range	
Cycle Use	25°C	14.7	14.4~15.0	0.3C
Standby	25°C	13.7	13.6~13.8	0.3C

Discharge Current VS. Discharge Voltage

Final Discharge Voltage V/cell	1.75V	1.70V	1.60V
Discharge Current (A)	(A) ≤ 0.2C	0.2C < (A) < 1.0C	(A) ≥ 1.0C

Charge the batteries at least once every six months, if they are stored at 25°C.

Charging Method:

Constant Voltage	2.25~2.50V, 5~11h, Max. Current 0.1CA
Constant Current	0.1CA × 5h
Fast	0.3CA × 1.7h

Charging Procedures(2V series)

Application	Charge Voltage (V)			Max. Charge Current
	Temperature	Set point	Allowable range	
Cycle Use	25°C	2.275	2.25~2.30	0.3C
Standby	25°C	2.425	2.4~2.45	0.3C