

BTL 2-600 (2V600Ah)

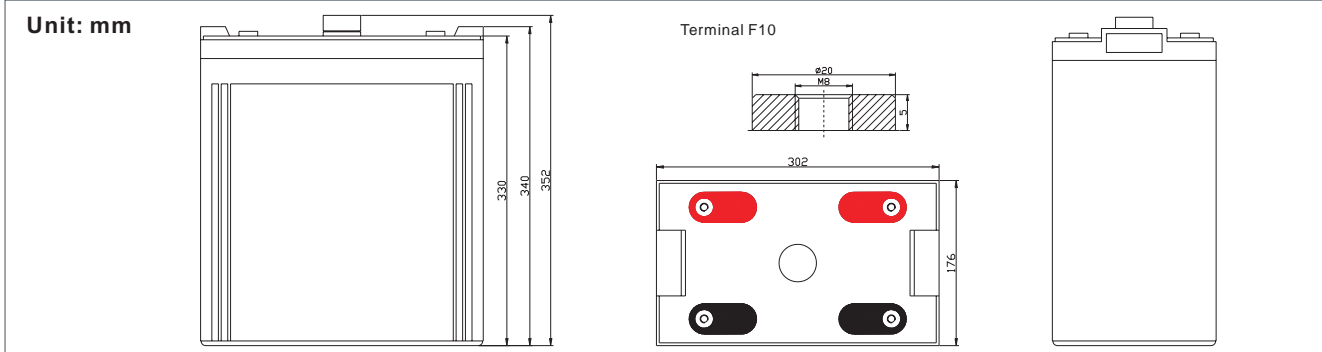


BTL 2-600 is a general purpose battery with 10~15 years expected life under normal float charge, As with all EFFEKTA batteries, all are rechargeable, highly efficient, leak proof and maintenance free.

Specification

Cells Per Unit	1
Voltage Per Unit	2
Capacity	600Ah @ 10hr-rate to 1.75V per cell @ 25°C
Weight	Approx. 42Kg
Max. Discharge Current	3000A(5sec)
Internal Resistance	Approx. 0.63mΩ
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	150A
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	1636	1273	661	418	251	191	124	64.2	53.9	28.2
1.65V	1454	1176	642	412	245	185	118	63.9	53.9	28.2
1.70V	1333	1091	612	394	239	176	112	63.6	53.9	27.3
1.75V	1227	1009	594	385	229	166	112	63.3	53.3	27.3
1.80V	1085	921	573	364	221	164	109	60.6	51.5	27.3
1.85V	800	715	467	300	200	152	99.4	57.3	49.1	26.7

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

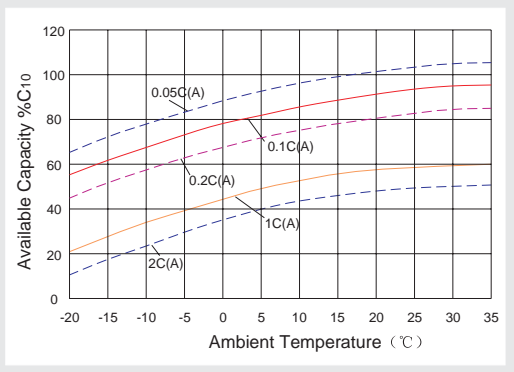
F.V/Time	5MIN	10MIN	30MIN	1HR	2HR	3HR	5HR	10HR	12HR	24HR
1.60V	2670	2155	1231	783	482	346	229	125	105	54.8
1.65V	2471	2026	2077	768	464	340	224	125	105	54.8
1.70V	2309	1878	1120	743	448	328	220	120	101	54.2
1.75V	2131	1794	1084	725	439	316	214	120	101	54.2
1.80V	1932	1646	933	629	424	313	211	119	101	54.2
1.85V	1481	1327	909	584	385	292	193	111	96.3	51.2

All mentioned values are average values.

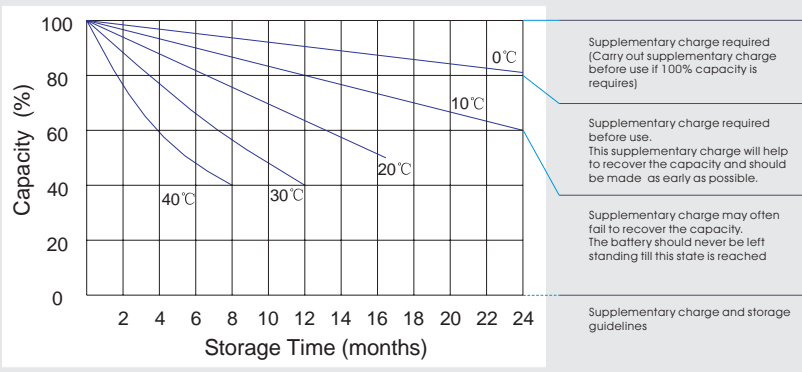
BTL 2-600

2V600Ah

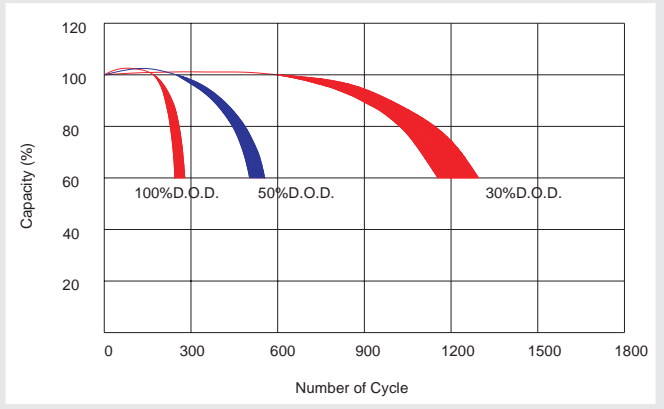
Temperature effects curve



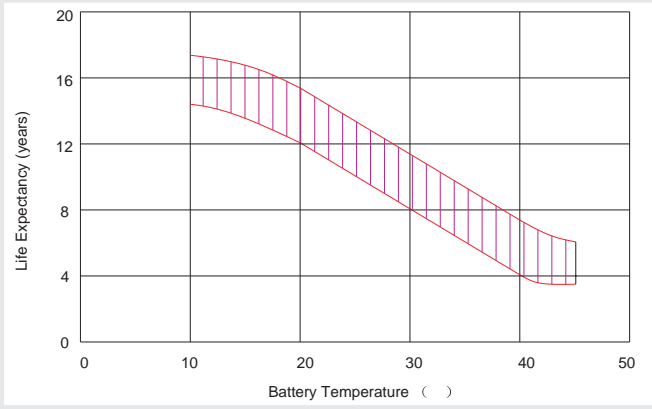
Storage characteristic



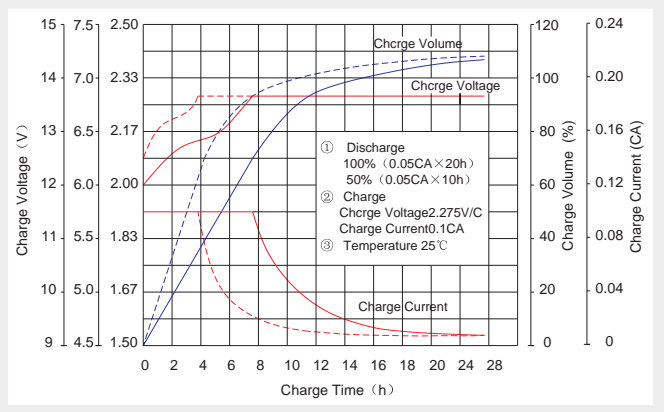
Life characteristics of cyclic use



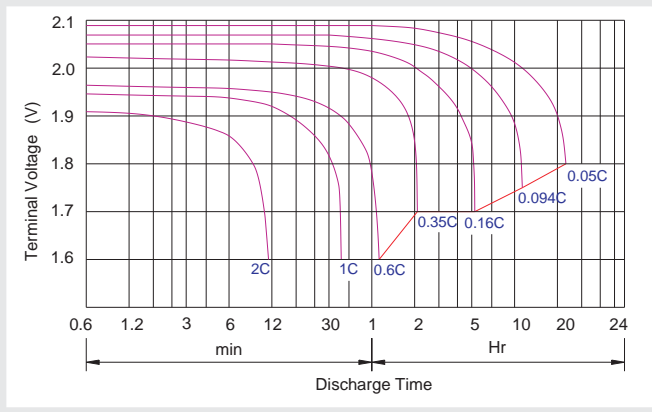
Effect of temperature on long term float life



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