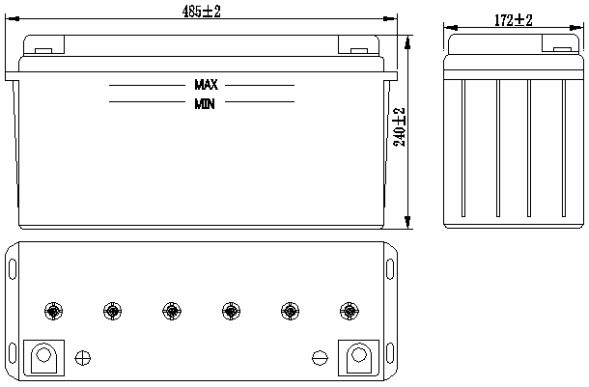
Specifications

Nominal Voltage		12 V
Capacity (20℃)	120HR(1.85V)	144 Ah
	10HR(1.80V)	120 Ah
	1HR(1.60V)	67.2Ah
Battery Weigh	Dry	29.4kg (64.7lbs)±5%
	Wet	42.5kg (93.5lbs)±5%
Acid Weight (d=1.24kg/l)		Approx.13.1kg (28.8lbs)
Terminal type /material		T11 / Copper
Internal resistance (Fully charged, 25℃)		Approx. 5.8mΩ
Self-discharge	1 month	Remaining Capacity: 86%(20℃)
Nominal operating temperature		20℃±5℃(68℉±9℉)
Operating temperature range	Discharge	-15℃～50℃(5℉～122℉)
	Charge	10℃～45℃(50℉～113℉)
	Storage	10℃～30℃(50℉～86℉)
Initial charging	Constant current	Charge the battery at 0.05 C_{10} for 72h.
	Constant voltage	Charge the battery at 0.1 C_{10} to 2.35v/cell; then Charge the battery with 2.35v/cell until the whole charge time up to 100h.
Mark of Fully charged	Constant current	The battery voltage and density of electrolyte remain stable over 2h at the end of charging , and strong bubbles generated within the electrolyte
	Constant voltage	The charging current and density of electrolyte kept constant for more than 3h at the end of the charge; and the charging current is about 0.002~0.005 C_{10} amp.
Supplementary charge		Charge the battery at 0.05 C_{10} to fully charged.
Equalizing charging		Charge the battery with 2.40v/cell for 48h.
Battery operation	Float charging	Charge the battery with 2.23V (25℃); Equalizing charging the battery when the abnormal occurs
	Charge& discharge	Equalizing charging the battery after discharged and per 3months
	Backup	Supplementary charge the battery per 3 or 6 months.
Maximum charging current		30.0A(0.25 C_{10})
Max. discharge current		1000A(5 sec.)
Designed cycle life		1600@80% DOD (30℃)
Designed floating life		20 years(20℃)

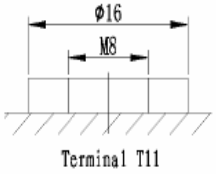
CHARACTERISTICS:

- Tubular Positive Plate;
- Flooded Battery;
- Porous Rubber and Porous PVC Separator
- Transparent Container.

Dimensions



Terminal



Terminal T11

Constant Current Discharge Characteristics (A, 25℃)

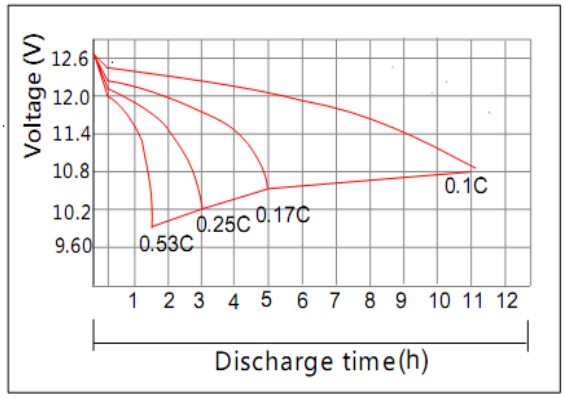
F.V/TIME	30min	60min	2h	3h	4h	5h	6h	8h	10h	20h	24h	48h
1.65V	96.5	66.2	40.0	31.2	25.1	22.1	18.7	14.3	12.2	6.59	5.74	----
1.70V	93.5	64.6	39.6	30.8	24.7	21.7	18.5	14.2	12.1	6.56	5.71	-----
1.75V	91.2	63.2	39.0	30.6	24.6	21.6	18.4	14.0	12.1	6.53	5.68	0.288
1.80V	87.8	61.3	38.0	29.6	23.9	21.0	17.8	13.6	12.0	6.48	5.64	0.288

Constant Power Discharge Characteristics (Watt per cell, 25℃)

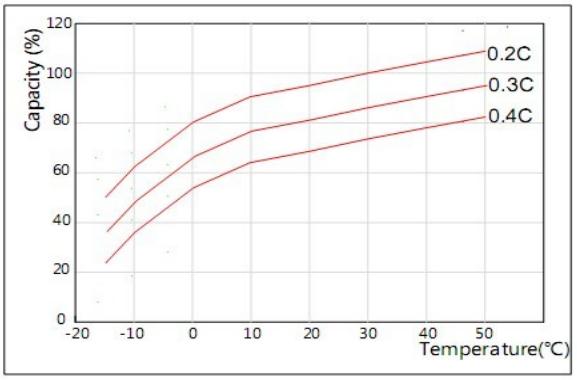
F.V/TIME	30min	60min	2h	3h	4h	5h	6h	8h	10h	20h	24h	48h
1.65V	180	126	77.2	61.2	49.2	43.4	37.0	28.4	24.2	13.2	11.5	----
1.70V	175	122	76.4	60.4	48.6	42.8	36.5	28.0	24.2	13.1	11.5	-----
1.75V	170	120	75.2	60.0	48.2	42.6	36.1	27.8	24.0	13.1	11.4	3.49
1.80V	164	116	73.3	58.2	46.8	41.3	35.0	27.0	23.9	13.0	11.3	3.49

Note: The above characteristics data can be obtained within three charge/discharge cycles.

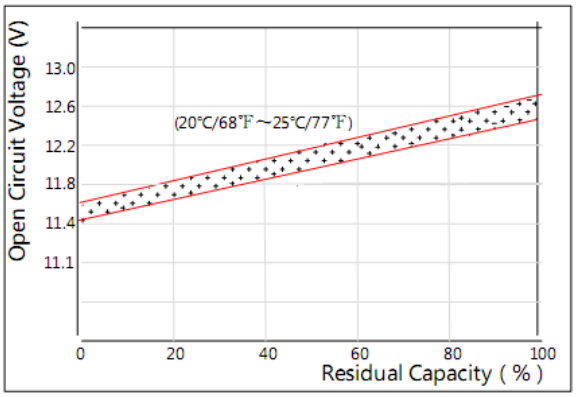
Discharge Characteristics(25℃)



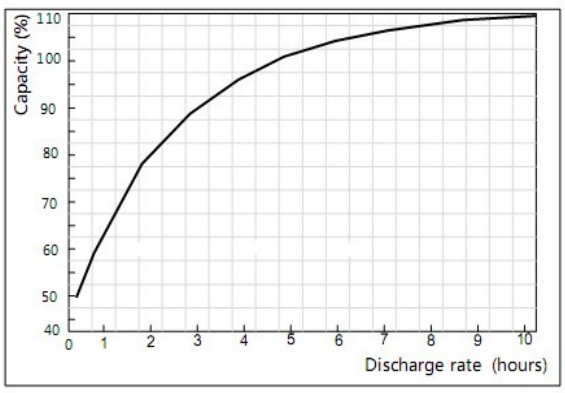
Effect of Temperature on Capacity



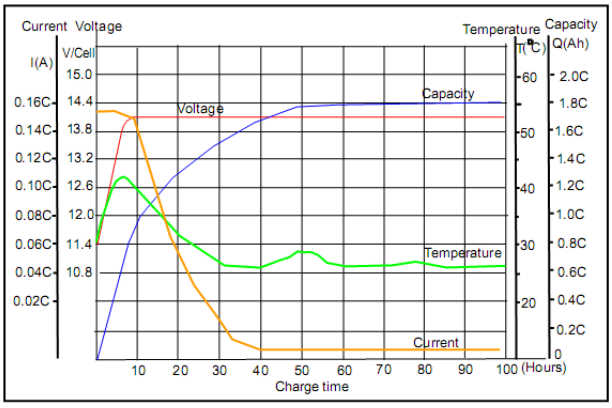
The Relationship for Open Circuit Voltage and Residual Capacity (25℃)



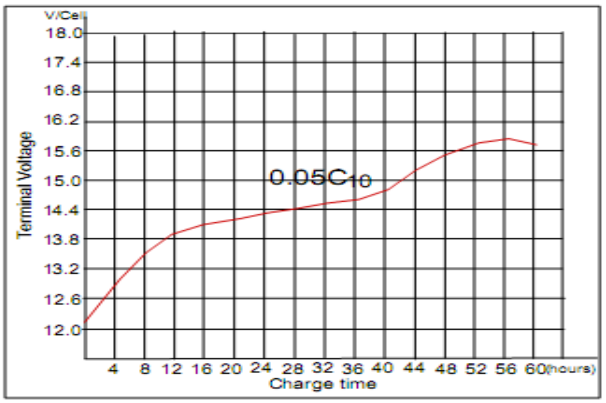
Effect of Discharge rate on Capacity



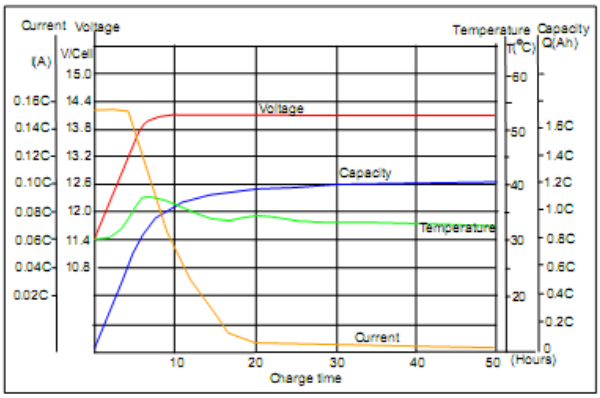
Initial Charging (CV)Characteristics



Initial Charging (CC)Characteristics(25℃)



Supplementary charge (CV) Characteristics



Cycle Life on D.O.D(25℃)