ULL SERIES-High Rate / UPS

ULL12-18 (12V18AH)

Specification

Nominal Voltage	12V
Watts(15min Rate)	67.4 Watts at 1.67V/cell
Dimension	Length 181.5±2mm (7.14 inches) Width 77±1mm (3.03 inches) Container Height 167.5±2mm (6.59inches) Total Height (with Terminal) 167.5±2mm (6.59inches)
Approx Weight	Approx 6.0 kg (13.2lbs)
Terminal	T3
Container Material	ABS
Rated Capacity	18.7 AH/1.87A (10hr ,1.80V/cell,25^{0}C/77^{0}F) 18.0 AH/2.25A (8hr,1.80V/cell,25^{0}C/77^{0}F) 17.1 AH/3.41A (5hr,1.75V/cell,25^{0}C/77^{0}F) 15.4 AH/5.14A (3hr,1.75V/cell,25^{0}C/77^{0}F) 13.0 AH/13.0A (1hr,1.60V/cell,25^{0}C/77^{0}F)
Max. Discharge Current	270A (5s)
Internal Resistance	Approx 15mΩ
Operating Temp.Range	Discharge : -15～50^{0}C (5～122^{0}F) Charge : 0～40^{0}C (32～104^{0}F) Storage : -15～40^{0}C (5～104^{0}F)
Nominal Operating Temp. Range	25±3^{0}C (77±5^{0}F)
Cycle Use	Initial Charging Current less than 5.4A.Voltage 14.4V~15.0V at 25^0 C(77^0 F)Temp. Coefficient -30mV/^{0}C
Standby Use	No limit on Initial Charging Current Voltage 13.5V~13.8V at 25^0 C(77^0 F)Temp. Coefficient -20mV/^{0}C
Capacity affected by Temperature	40^o C (104^o F) 103% 25^o C (77^o F) 100% 0^o C (32^o F) 86%
Self Discharge	USB ULL series batteries may be stored for up to 6 months at 25^0 C(77^{0}F) and then a freshening charge is required. For higher temperatures the time interval will be shorter.

Applications

- *UPS (High rate)*
- *High power backup supply*
- *Emergency power supply*
- *Starting system*
- *Power tools*
- *Emergency lighting*
- *Electric starting*

Constant Current Discharge (Amperes) at 25 ^{0} C (77^0 F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	55.0	36.5	30.1	25.2	19.0	14.0	11.3	6.47	4.71	3.78	3.18	2.73	2.16	1.80	1.00
1.80V/cell	60.4	40.1	32.6	27.2	20.0	14.8	11.7	6.80	5.00	3.99	3.32	2.87	2.25	1.87	1.01
1.75V/cell	65.2	43.6	34.6	28.7	20.9	15.3	12.1	7.01	5.14	4.08	3.41	2.94	2.30	1.89	1.02
1.70V/cell	68.8	46.1	36.4	30.0	21.7	15.8	12.5	7.22	5.27	4.17	3.49	2.99	2.34	1.92	1.03
1.67V/cell	72.5	48.2	37.6	30.9	22.4	16.3	12.9	7.38	5.33	4.23	3.53	3.05	2.37	1.95	1.04
1.60V/cell	77.1	50.1	38.7	31.5	22.7	16.4	13.0	7.50	5.41	4.29	3.58	3.08	2.39	1.96	1.05

Constant Power Discharge (Watts/cell) at 25 ^{0} C (77^0 F)

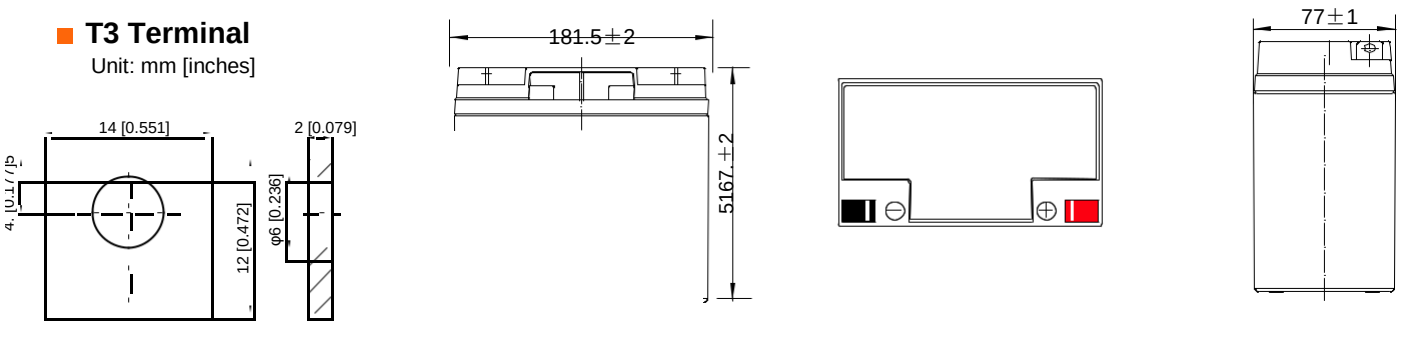
F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	102.6	68.3	56.5	47.5	36.2	26.9	21.8	12.6	9.17	7.40	6.23	5.36	4.26	3.55	1.98
1.80V/cell	109.2	73.5	60.4	50.9	37.8	28.1	22.4	13.1	9.68	7.77	6.49	5.62	4.46	3.70	2.00
1.75V/cell	116.8	79.1	63.4	53.2	39.2	29.0	23.1	13.5	9.92	7.91	6.63	5.73	4.52	3.73	2.02
1.70V/cell	121.6	82.4	66.0	55.2	40.4	29.8	23.9	13.8	10.1	8.06	6.77	5.83	4.59	3.79	2.04
1.67V/cell	126.2	85.0	67.4	56.3	41.5	30.4	24.4	14.1	10.2	8.15	6.83	5.93	4.64	3.83	2.05
1.60V/cell	131.8	87.0	68.2	56.4	41.4	30.5	24.5	14.3	10.3	8.24	6.91	5.96	4.66	3.85	2.07

Specifications subject to change without notice.

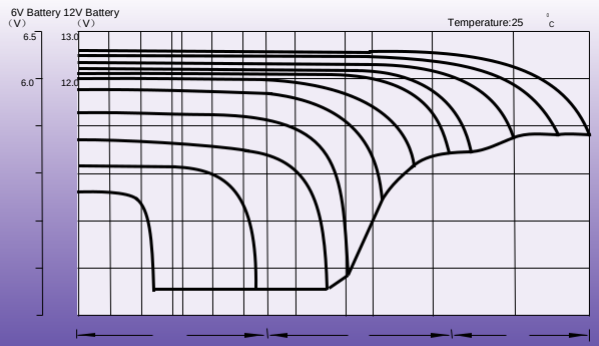
Dimensions

T3 Terminal

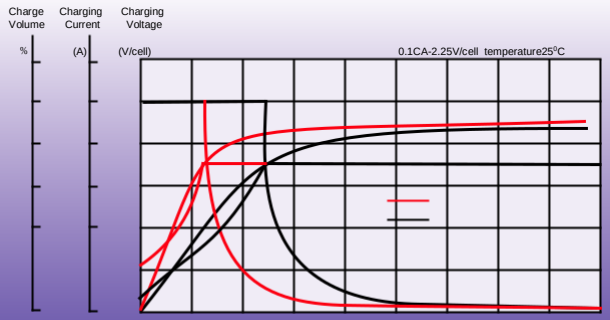
Unit: mm [inches]



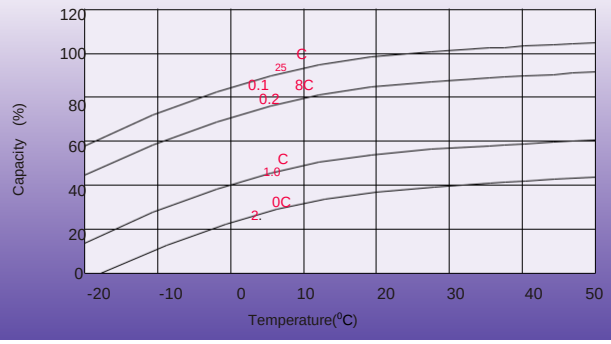
Discharge Characteristics



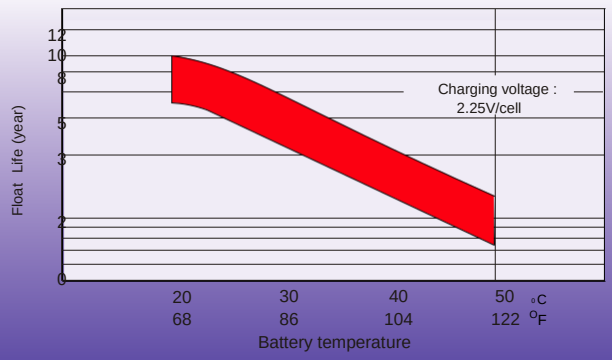
Float Charging Characteristics

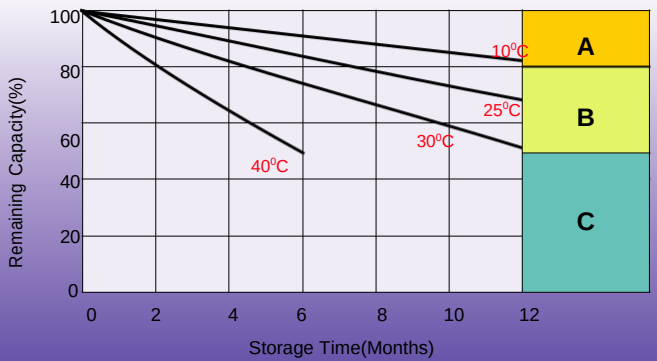


Temperature Effects in Relation to Battery Capacity



Effect of Temperature on Long Term Float Life





Self Discharge Characteristics

A — **No supplementary charge required**

(Carry out supplementary charge before use if 100% capacity is required.)
Supplementary charge required before use.Optional charging way as below:
1.Charged for above 3 days at limted current 0.25CA and constant volatge 2.25V/cell.

B — 2.Charged for above 20hours at limted current 0.25CA and constant volatge 2.45V/cell.
3.Charged for 8~10hours at limted current 0.05CA .

C — Supplementary charge may often fail to recover the capacity.
The battery should never be left standing till this is reached.

Sales Office