



General Features



- ◆ Sealed and maintenance free operation.
- ◆ Non-Spillable construction design.
- ◆ ABS containers and covers(UL94HB, UL94V-0) optional.
- ◆ Safety valve installation for explosion proof.
- ◆ High quality and high reliability.
- ◆ Exceptional deep discharge recovery performance.
- ◆ Low self discharge characteristic.
- ◆ Flexibility design for multiple install positions.



Battery Type	Valve-Regulated, Absorbed Glass Mat (AGM) Technology			
Nominal Voltage	12V			
Capacity(20°C)	20HR(0.68A, 1.8V/cell)	10HR(1.26A, 1.80V)	5HR(2.28A, 1.75V)	1HR(8.35A, 1.60V)
	13.6AH	12.6AH	11.4AH	8.35AH
Dimensions	Length	Width	Height	Total Height
	151mm(5.95inches)	98mm(3.86inches)	95mm(3.74inches)	101mm(3.98inches)
Approx Weight	Approx 4.20 kg (9.26lbs)			
Internal Resistance	Full Charged at 20°C : Approx 14mΩ			
Self Discharge	3% of capacity declined per month at 20°C			
Capacity affected by Temperature(10HR)	40°C	25°C	0°C	-15°C
	103%	100%	86%	65%
Charging Voltage (V)	Cycle use		Float use	
	14.4V~15.0V at 20°C. Temp. Coefficient -30mV/°C		13.5V~13.8V at 20°C. Temp. Coefficient (-20mV/°C)	
Current	Max. Discharge Current		Initial Charging Current	
	210A		Less than 4.2A	
Operating Temp. Range	Discharge	Charging	Storage	
	-15~50°C (5~122°F)	0~40°C (32~104°F)	-15~40°C (5~104°F)	

Constant Current Discharge (Amperes) at 20 °C (68 °F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	25.3	19.4	16.1	13.9	10.8	7.93	6.69	4.00	3.13	2.54	2.07	1.82	1.47	1.22	0.67
1.80V/cell	34.0	24.9	19.5	16.5	12.7	9.23	7.49	4.36	3.37	2.71	2.23	1.95	1.56	1.26	0.68
1.75V/cell	38.3	27.3	21.3	17.7	13.2	9.58	7.84	4.52	3.43	2.78	2.28	2.00	1.58	1.30	0.69
1.70V/cell	42.2	29.8	22.7	18.6	13.7	10.0	8.09	4.64	3.52	2.85	2.34	2.05	1.60	1.32	0.70
1.65V/cell	46.5	32.1	24.1	19.8	14.5	10.2	8.27	4.70	3.67	2.95	2.41	2.09	1.63	1.35	0.71
1.60V/cell	51.3	34.9	25.8	21.1	15.3	10.6	8.35	4.91	3.78	3.04	2.49	2.13	1.65	1.36	0.71

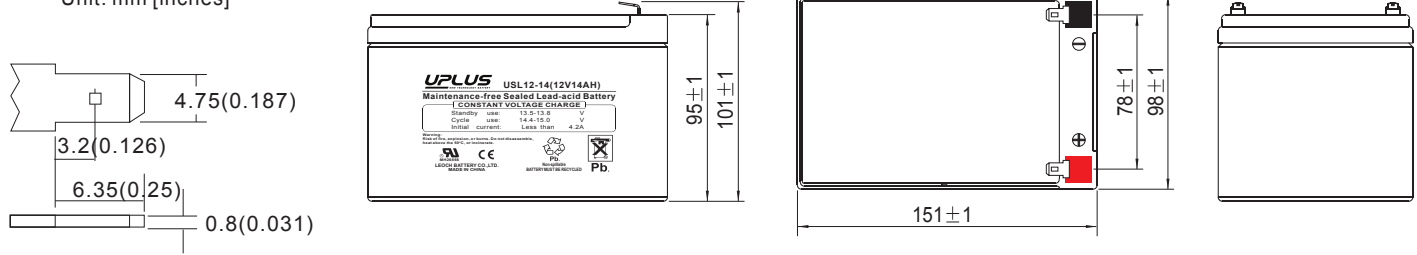
Constant Power Discharge (Watts) at 20 °C (68 °F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	46.3	35.9	30.1	26.3	20.5	15.3	12.9	7.76	6.10	4.97	4.07	3.57	2.89	2.42	1.33
1.80V/cell	61.5	45.4	35.8	30.6	23.9	17.6	14.4	8.42	6.52	5.28	4.34	3.82	3.06	2.50	1.34
1.75V/cell	67.9	49.1	38.7	32.6	24.6	18.1	15.0	8.69	6.62	5.38	4.44	3.91	3.11	2.56	1.35
1.70V/cell	72.7	52.3	40.7	34.0	25.4	18.7	15.4	8.89	6.79	5.51	4.55	3.99	3.15	2.61	1.38
1.65V/cell	79.0	55.9	42.9	35.8	26.6	19.0	15.6	8.97	7.05	5.68	4.66	4.06	3.19	2.66	1.40
1.60V/cell	85.1	59.3	45.2	37.8	27.9	19.7	15.7	9.31	7.23	5.84	4.79	4.14	3.21	2.68	1.40

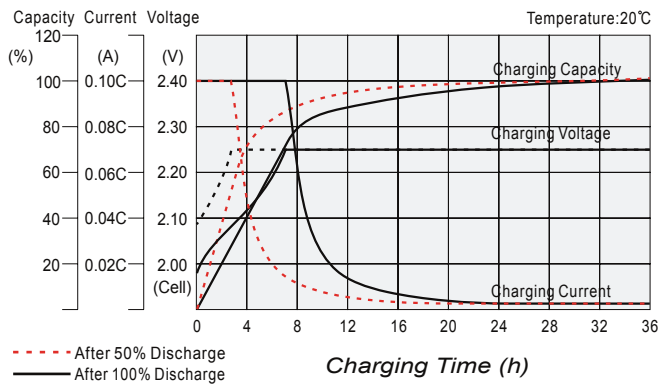
Dimensions

T1 Terminal

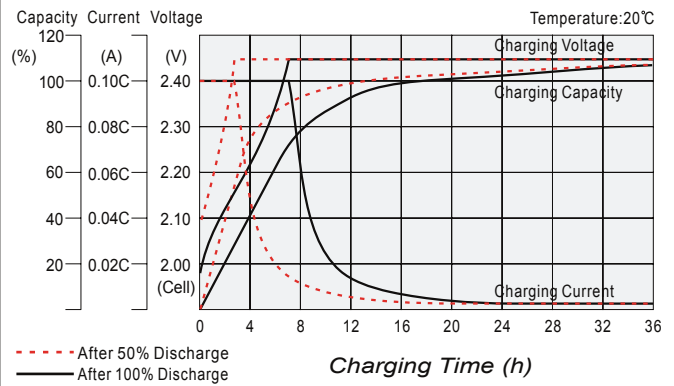
Unit: mm [inches]



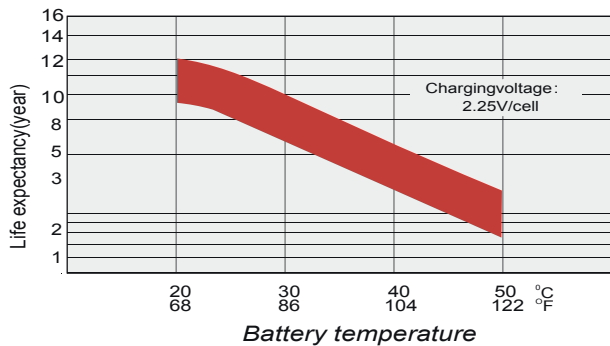
Float charging characteristics



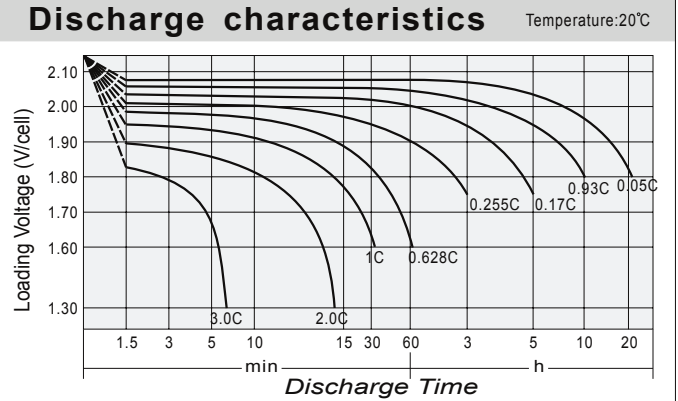
Cycle use charging characteristics



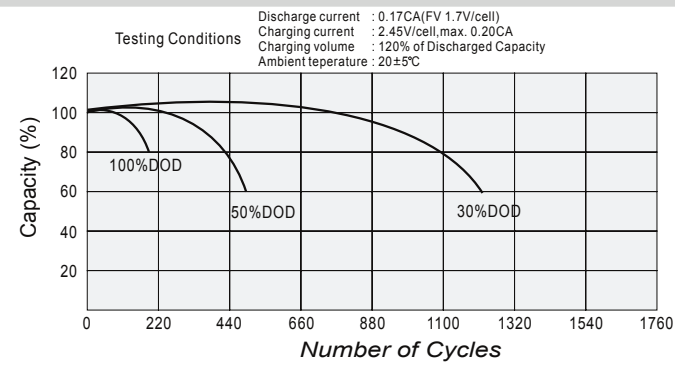
Effect of Temperature on Long Term Float Life



Discharge characteristics



Cycle Life in Relation to Depth of Discharge



Self Discharge Characteristics

