

UP20-4



Specification		
Nominal Voltage	4V	
Nominal Capacity (20HR)	20.0AH	
Dimension	Length	149±2mm (5.87 inches)
	Width	43±1mm (1.69 inches)
	Container Height	154±2mm (6.06 inches)
	Total Height (with Terminal)	166±2mm (6.53 inches)
Approx Weight	Approx 2.1 kg (4.63lbs)	
Terminal	T2 / T3	
Container Material	ABS	
Rated Capacity	20.0 AH/1.00A	(20hr, 1.80V/cell, 25°C/77°F)
	18.6 AH/1.86A	(10hr, 1.80V/cell, 25°C/77°F)
	17.0 AH/3.40A	(5hr, 1.75V/cell, 25°C/77°F)
	15.3 AH/5.10A	(3hr, 1.75V/cell, 25°C/77°F)
	12.6 AH/12.6A	(1hr, 1.60V/cell, 25°C/77°F)
Max. Discharge Current	300A (5s)	
Internal Resistance	Approx 8mΩ	
Operating Temperature Range	Discharge: -15~50°C (5~122°F)	
	Change : 0~40°C (32~104°F)	
	Storage : -15~40°C (5~104°F)	
Nominal Operating Temperature Range	25±3°C (77±5°F)	
Cycle Use	Initial Charging Current less than 6.0A.Voltage. 4.8V~5.0V at 25°C (77°F) Temp. Coefficient -10mV/°C	
Standby Use	No limit on Initial Charging Current Voltage. 4.5V~4.6V at 25°C (77°F) Temp. Coefficient -6mV/°C	
Capacity affected by Temperature	40°C (104°F) 103%	
	25°C (77°F) 100%	
	0°C (32°F) 86%	
Self Discharge	Batteries may be stored for up to 6 months at 25°C (77°F) and then a freshening charge is required.	

Constant Current Discharge (Amperes) at 25°C (77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	38.1	29.2	24.2	20.9	16.2	11.9	10.1	5.95	4.65	3.78	3.09	2.68	2.16	1.80	0.99
1.80V/cell	51.1	37.4	29.3	24.8	19.1	13.9	11.3	6.49	5.01	4.04	3.31	2.87	2.29	1.86	1.00
1.75V/cell	57.6	41.1	32.0	26.6	19.8	14.4	11.8	6.73	5.10	4.13	3.40	2.95	2.33	1.91	1.01
1.70V/cell	63.5	44.8	34.1	28.0	20.7	15.0	12.2	6.90	5.24	4.24	3.49	3.01	2.36	1.95	1.03
1.65V/cell	70.0	48.3	36.3	29.7	21.8	15.4	12.4	7.00	5.47	4.39	3.58	3.08	2.40	1.99	1.04
1.60V/cell	77.2	52.4	38.8	31.7	23.0	16.0	12.6	7.30	5.63	4.52	3.70	3.14	2.42	2.01	1.05

Constant Power Discharge (Watts) at 25°C (77°F)

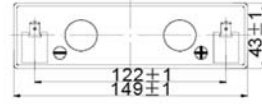
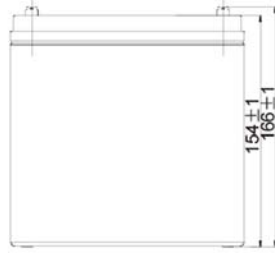
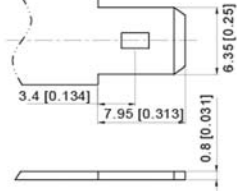
F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	69.6	54.0	45.2	39.5	30.9	22.9	19.4	11.6	9.07	7.40	6.05	5.26	4.26	3.57	1.96
1.80V/cell	92.5	68.2	53.9	46.0	35.9	26.5	21.6	12.5	9.71	7.86	6.46	5.62	4.51	3.68	1.98
1.75V/cell	102.0	73.8	58.1	49.0	36.9	27.2	22.5	12.9	9.85	8.00	6.61	5.76	4.58	3.77	2.00
1.70V/cell	109.3	78.6	61.2	51.1	38.2	28.2	23.1	13.2	10.1	8.20	6.77	5.87	4.64	3.84	2.03
1.65V/cell	118.8	84.0	64.6	53.9	40.0	28.6	23.5	13.3	10.5	8.45	6.93	5.98	4.70	3.91	2.05
1.60V/cell	128.0	89.1	67.9	56.8	41.9	29.7	23.6	13.9	10.8	8.69	7.13	6.09	4.73	3.95	2.06



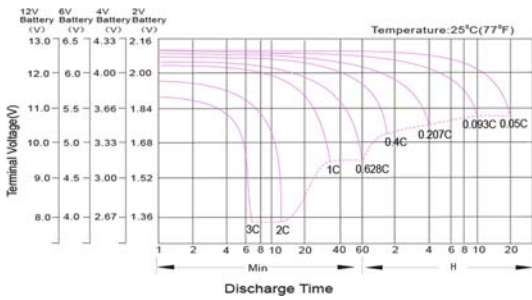
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Dimensions

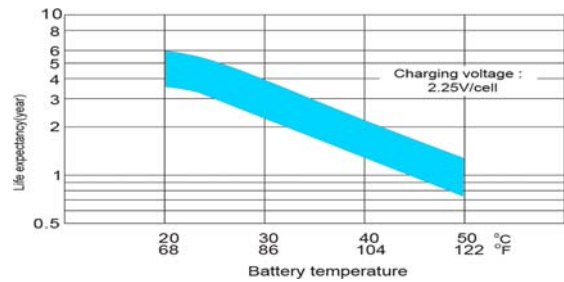
T2 Terminal
Unit: mm [inches]



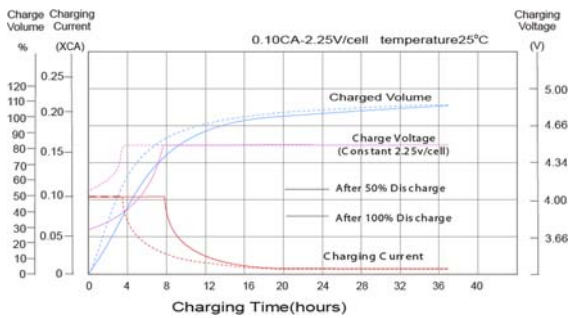
Discharge Characteristics



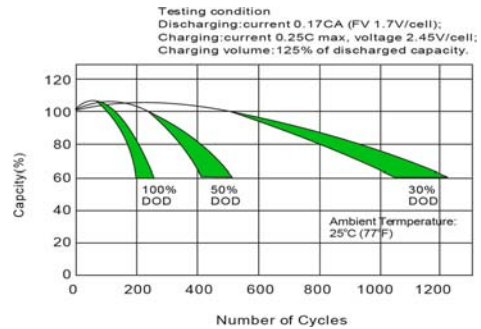
Effect of Temperature on Long Term Float Life



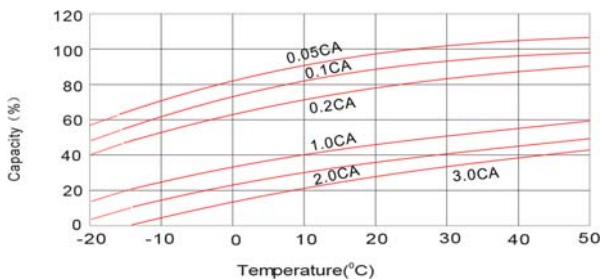
Float Charging Characteristics



Cycle Life in Relation to Depth of Discharge



Temperature Effects in Relation to Battery Capacity



Self Discharge Characteristics

