

UP-G20-12



Specification		
Nominal Voltage	12V	
Nominal Capacity (20HR)	20.0AH	
Dimension	Length	181±1mm (7.13 inches)
	Width	77±1mm (3.03 inches)
	Height	167±1mm (6.57 inches)
	Total Height	167±1mm (6.57 inches)
	Approx Weight	6.0±3%
Terminal	Female Copper Insert L1 (torque:4~6N.m)	
Container Material	ABS	
Rated Capacity	20.0 AH	20 hour rate (1.00A, 10.50V)
	18.8 AH	10 hour rate (1.88A, 10.8V)
	17.3 AH	5 hour rate (3.46A, 10.5V)
	12.5 AH	1 hour rate (12.5A, 9.6V)
Max. Discharge Current	300A (5s)	
Internal Resistance	≤ 25mΩ	
Operating Temperature Range	Discharge:	-20~50°C (-4~122°F)
	Change :	-20~50°C (-4~122°F)
	Storage :	-20~50°C (-4~122°F)
Nominal Operating Temperature Range	25°C (77°F)	
Cycle Charge	Initial Charging Current Less than 6.0A Voltage 14.4-14.8V	
Standby Use	No limit on Initial Charging Current Voltage. 13.6V~13.8V at 25°C (77°F) Temp. Coefficient -20mV/°C	
Capacity affected by Temperature	40°C (104°F)	102%
	25°C (77°F)	100%
	0°C (32°F)	85%
	-15°C (5°F)	65%
Self Discharge	Batteries may be stored for up to 9 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	30min	45min	1h	2h	3h	5h	8h	10h	20h
1.60V/cell	72.10	44.70	34.10	20.30	16.63	12.50	7.80	5.57	3.60	2.42	1.98	1.057
1.67V/cell	67.00	43.20	33.00	19.80	16.36	12.40	7.71	5.51	3.56	2.40	1.96	1.037
1.70V/cell	62.20	41.30	32.10	19.50	16.16	12.20	7.63	5.46	3.51	2.37	1.93	1.020
1.75V/cell	56.70	39.50	31.30	19.00	15.73	11.86	7.53	5.34	3.46	2.35	1.91	1.000
1.80V/cell	50.80	37.30	30.60	18.70	15.21	11.51	7.42	5.14	3.42	2.32	1.88	0.980

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

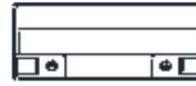
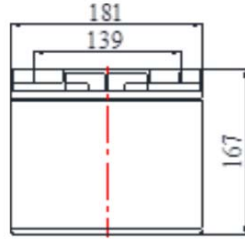
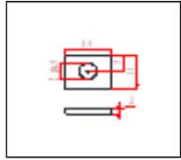
F.V/Time	5min	10min	15min	30min	45min	1h	2h	3h	5h	8h	10h	20h
1.60V/cell	131	89.3	69.2	41.7	32.46	24.5	14.7	10.6	6.84	4.66	3.83	2.06
1.67V/cell	122	87.2	67.3	41.0	32.03	24.4	14.6	10.5	6.81	4.63	3.80	2.04
1.70V/cell	115	84.3	66.2	40.6	31.71	23.9	14.5	10.4	6.78	4.61	3.79	2.01
1.75V/cell	105	81.5	65.2	40.0	30.94	23.0	14.4	10.3	6.74	4.60	3.77	1.99
1.80V/cell	95	77.9	63.8	39.6	30.00	22.1	14.3	10.1	6.71	4.59	3.75	1.95



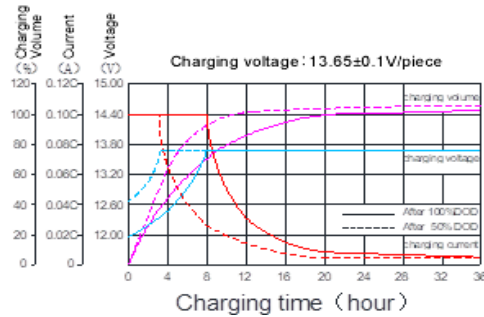
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Dimensions

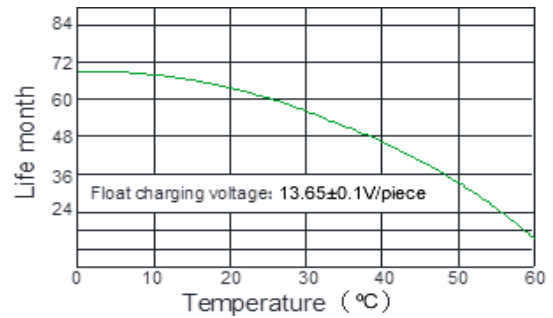
Terminal



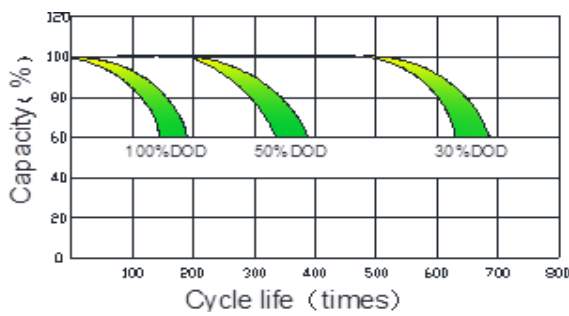
Charging Characteristics (@25°C/77°F)



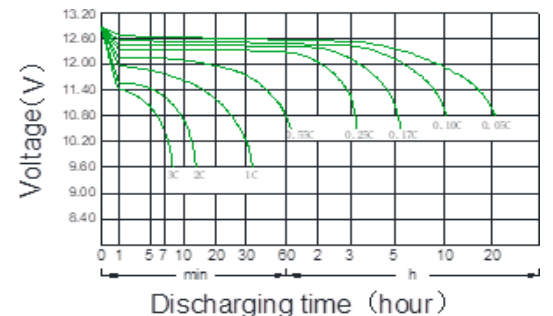
Temperature Effects on Design Service Life



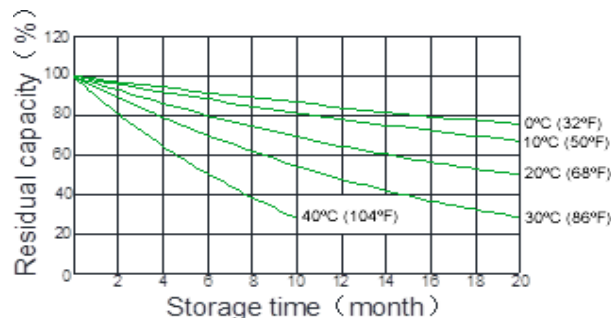
Cycle Life vs. Depth of Discharge (@25°C/77°F)



Discharge Characteristics (@25°C/77°F)



Temperature Effects on Battery Self-Discharge



Temperature Effects on Capacity

