

**UP-G40-12**



Specification	
Nominal Voltage	12V
Nominal Capacity (20HR)	40.0AH
Dimension	Length 197±2mm (7.76 inches)
	Width 165±2mm (6.50 inches)
	Container Height 170±2mm (6.69 inches)
	Total Height (with Terminal) 170±2mm (6.69 inches)
Approx Weight	Approx 13.5 kg (29.77lbs)
Terminal	T6
Container Material	ABS
Rated Capacity	41.6 AH/2.08A (20hr, 1.80V/cell, 25°C/77°F)
	37.0AH/3.77A (10hr, 1.75V/cell, 25°C/77°F)
	33.2 A H/6.64A (5hr, 1.75V/cell, 25°C/77°F)
	28,8 AH/9.61A (3hr, 1.75V/cell, 25°C/77°F)
	22.85 AH/22.85A (1hr, 1.67V/cell, 25°C/77°F)
Max. Discharge Current	380A (5s)
Internal Resistance	Approx 12.0mΩ
Operating Temperature Range	Discharge: -20~55°C (-4~131°F)
	Change : 0~40°C (32~104°F)
	Storage : -20~50°C (-4~122°F)
Nominal Operating Temperature Range	25±3°C (77±5°F)
Cycle Use	Initial Charging Current less than 7.6A.Voltage. 14.4V~15.0V at 25°C (77°F) Temp. Coefficient -30mV/°C
Standby Use	No limit on Initial Charging Current Voltage. 13.5V~13.8V at 25°C (77°F) Temp. Coefficient -20mV/°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 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	20min	30min	45min	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	20h
1.85V/cell	35,10	27,55	21,05	17,60	11,15	8,51	7,05	6,09	5,25	4,65	4,20	3,84	3,54	1,99
1.80V/cell	40,20	30,80	23,15	19,45	12,10	9,12	7,47	6,39	5,52	4,87	4,39	4,03	3,70	2,08
1.75V/cell	45,20	33,85	25,10	20,75	12,80	9,61	7,82	6,64	5,71	5,04	4,54	4,15	3,77	2,12
1.70V/cell	48,70	36,25	26,65	22,00	13,55	10,04	8,08	6,85	5,91	5,21	4,67	4,26	3,86	2,14
1.67V/cell	50,65	37,70	27,55	22,85	13,90	10,34	8,28	6,99	6,01	5,29	4,74	4,32	3,90	2,17
1.60V/cell	54,90	40,30	29,60	24,25	14,50	10,78	8,60	7,21	6,15	5,40	4,83	4,41	3,98	2,20

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

F.V/Time	20min	30min	45min	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	20h
1.85V/cell	67,20	53,10	40,75	34,25	21,85	16,70	13,85	12,00	10,41	9,23	8,34	7,64	7,05	3,98
1.80V/cell	76,00	58,75	44,65	37,60	23,50	17,80	14,65	12,55	10,90	9,61	8,72	8,01	7,35	4,14
1.75V/cell	84,40	64,10	47,90	40,05	24,80	18,75	15,30	13,00	11,25	9,96	8,98	8,24	7,49	4,22
1.70V/cell	89,95	68,00	50,45	42,15	26,20	19,45	15,75	13,40	11,60	10,25	9,23	8,45	7,66	4,26
1.67V/cell	92,60	69,90	51,90	43,45	26,75	20,00	16,05	13,65	11,75	10,40	9,33	8,54	7,74	4,30
1.60V/cell	99,20	74,15	55,35	45,95	27,65	20,75	16,60	14,00	12,00	10,59	9,50	8,71	7,88	4,36

**UP-G40-12**

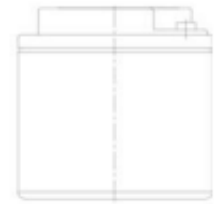
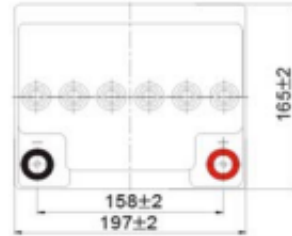
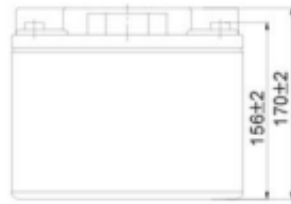
**Dimensions**

■ T6 Terminal  
Unit: mm [inches]

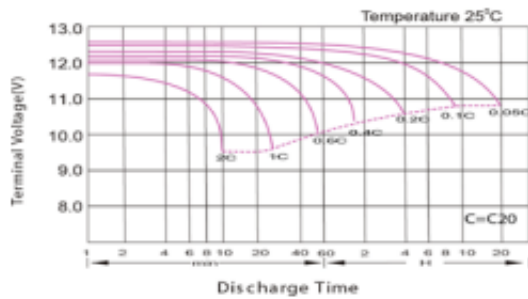
+16 [0.63]

M6 [0.236]

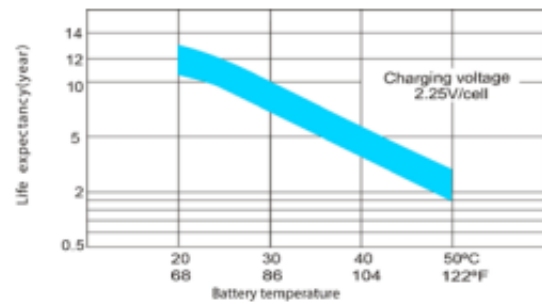
6 [0.236]



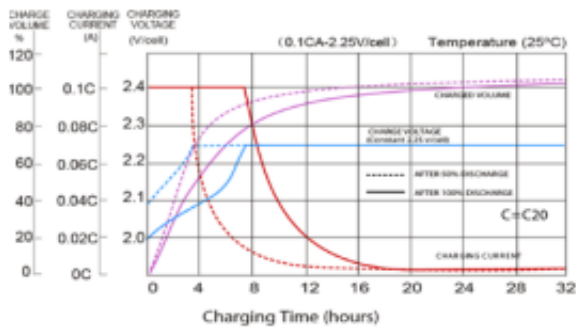
**Discharge Characteristics**



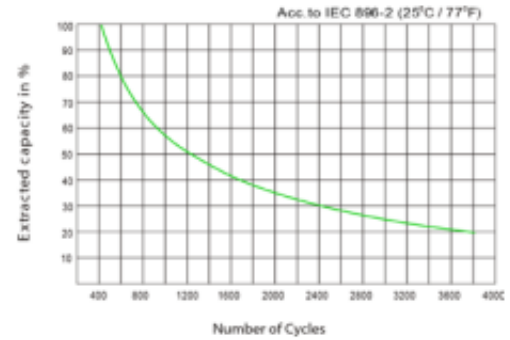
**Effect of Temperature on Long Term Float Life**



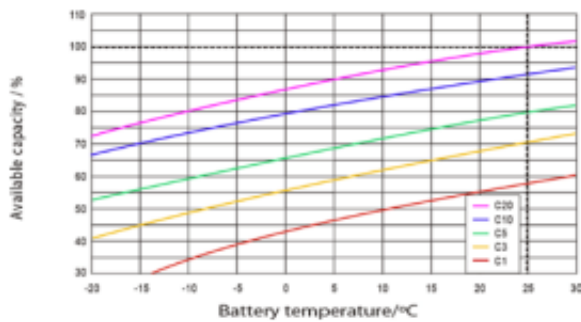
**Float Charging Characteristics**



**Cycle Life in Relation to Depth of Discharge**



**Temperature Effects in Relation to Battery Capacity**



**General Relation of Capacity VS. Storage Time**

