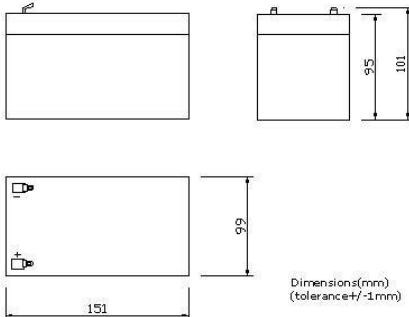
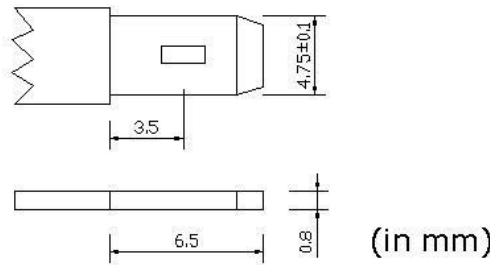


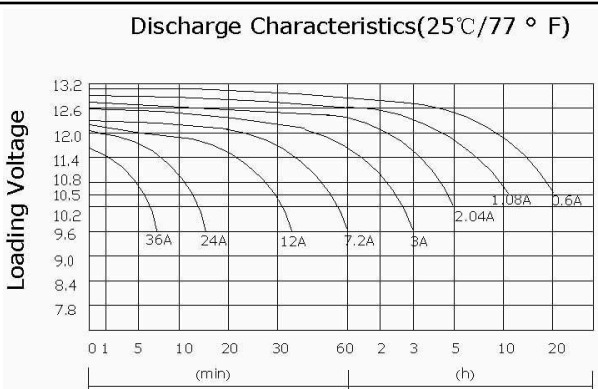
Lightwave

LW 12Ah

PHYSICAL SPECIFICATION

Nominal Voltage Nominal Capacity (20HR)		12V 12Ah	
Dimension	Length	151±1mm (5.94 inches)	
	Width	99±1mm (3.90 inches)	
	Container Height	95±1mm (3.74 inches)	
	Total Height	101±1mm (3.98 inches)	
Weight		Approx. 3.2Kg(7.05lbs) ±5%	
Standard Terminal		Fasten Tab No.187E	
			F1(Fasten Tab No.187E) Standard Terminal 

ELECTRICAL SPECIFICATION

Characteristics			Discharge curves @ 25°C (77 °F)		
Capacity	20 hour rate (0.6A)	12Ah	Discharge Characteristics(25°C/77 ° F) 		
	10 hour rate (1.08A)	11.4Ah			
	5 hour rate (2.04A)	10.2Ah			
	3 hour rate (3.0A)	9.0Ah			
	1 hour rate (7.2A)	7.2Ah			
Capacity affected by temperature	40°C (104 °F)	102%			
	25°C (77 °F)	100%			
	0°C (32 °F)	85%			
Internal Resistance		Full charged battery (25°C,77 °F) 17mΩ			
Constant Voltage Charge	Cycle	Initial Charging Current less than 3.6A Voltage 14.4~15.0V at 25°C (77 °F) Temperature Coefficient -30mV/°C			
	Standby	No limit on Initial Charging Current Voltage 13.5~13.8V at 25°C (77 °F) Temperature Coefficient -20mV/°C			

CONSTANT CURRENT DISCHARGE RATING A@25°C

F.V/TIME	5MIN	10MIN	15MIN	30MIN	1HR	3HR	5HR	10HR	20HR
1.60V	43.5	27.1	20.4	12.5	7.94	3.48	2.13	1.18	0.62
1.67V	40.8	25.7	19.7	11.9	7.82	3.34	2.07	1.18	0.60
1.70V	37.4	24.7	19.2	10.8	7.58	3.12	2.04	1.17	0.60
1.75V	36.7	24.0	18.5	10.3	7.22	3.02	1.99	1.15	0.58
1.80V	32.9	23.0	16.9	9.53	6.75	2.90	1.87	1.15	0.57

CONSTANT POWER DISCHARGE RATING WATT PER CELL@25°C

F.V/TIME	5MIN	10MIN	15MIN	30MIN	1HR	3HR	5HR	10HR	20HR
1.60V	76.3	48.9	37.4	22.5	14.3	6.17	3.58	2.38	1.25
1.67V	73.7	47.7	36.9	21.9	14.2	5.97	3.58	2.37	1.20
1.70V	69.4	47.1	36.5	20.6	13.9	5.71	3.53	2.35	1.18

1.75V	64.8	47.0	36.2	19.9	13.7	5.57	3.50	2.31	1.17
1.80V	63.9	46.3	33.6	19.0	12.9	5.40	3.39	2.28	1.13