

LPG SERIES-GEL Battery

LPG2-500 (2V500AH)

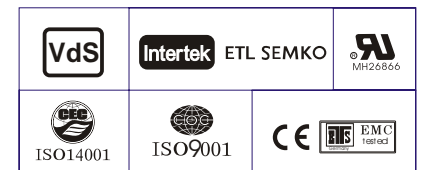
Specification

Nominal Voltage	2V	
Nominal Capacity(10HR)	500.0AH	
Dimension	Length	240±3mm (9.45 inches)
	Width	175±2mm (6.89 inches)
	Container Height	330±3mm (12.99 inches)
	Total Height (with Terminal)	340±3mm (13.39inches)
Approx Weight	Approx 32.8kg (72.3lbs)	
Terminal	T11	
Container Material	ABS	
Rated Capacity	543.2 AH/27.16A	(20hr, 1.80V/cell, 25°C/77°F)
	500.0 AH/50.00A	(10hr, 1.80V/cell, 25°C/77°F)
	438.0 AH/87.6A	(5hr, 1.75V/cell, 25°C/77°F)
	396.6 AH/132.2A	(3hr, 1.75V/cell, 25°C/77°F)
	298.7 AH/298.7A	(1hr, 1.67V/cell, 25°C/77°F)
Max. Discharge Current	3500A (5s)	
Internal Resistance	Approx 0.55mΩ	
Operating Temp. Range	Discharge : -20~55°C (-4~131°F)	
	Charge : -10~45°C (14~113°F)	
	Storage : -20~50°C (-4~122°F)	
Nominal Operating Temp. Range	25±3°C (77±5°F)	
Cycle Use	Initial Charging Current less than 125.0A. Voltage	
	2.40V~2.50V at 25°C(77°F)Temp. Coefficient -5mV/°C	
Standby Use	No limit on Initial Charging Current Voltage	
	2.25V~2.30V at 25°C(77°F)Temp. Coefficient -3mV/°C	
Capacity affected by Temperature	40°C (104°F)	103%
	25°C (77°F)	100%
	0°C (32°F)	86%
Self Discharge	Leoch LPG series batteries may be stored for up to 9 months at 25°C(77°F) and then a freshening charge is required. For higher temperatures the time interval will be shorter.	



Applications

- ◆ Telecommunications
- ◆ Solar system
- ◆ Wind power system
- ◆ Engine starting
- ◆ Wheelchair
- ◆ Floor cleaning machines
- ◆ Golf trolley
- ◆ Boats



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	443.0	348.3	265.4	230.7	147.1	116.8	92.9	80.2	69.2	61.3	55.3	50.5	47.9	26.07
1.80V/cell	508.7	389.0	293.3	254.6	159.4	125.1	98.5	84.3	72.7	64.2	58.0	53.2	50.0	27.16
1.75V/cell	571.3	427.7	316.4	271.9	168.8	132.2	103.2	87.6	75.3	66.5	59.8	54.8	51.0	27.70
1.70V/cell	615.6	458.2	336.0	288.2	179.0	137.6	106.5	90.2	77.9	68.7	61.6	56.2	52.2	28.08
1.67V/cell	640.0	476.6	348.3	298.7	183.6	142.1	109.2	92.2	79.2	69.7	62.5	57.0	52.8	28.34
1.60V/cell	693.5	509.2	374.1	317.2	190.9	147.7	113.3	95.0	81.1	71.1	63.6	58.2	53.8	28.74

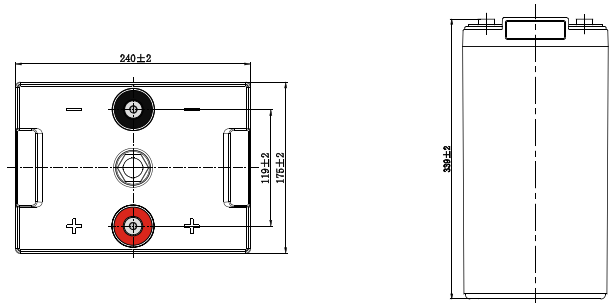
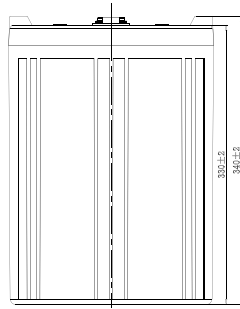
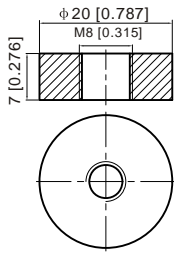
Constant Power Discharge (Watts) at 25 °C (77°F)

F.V/Time	20min	30min	45min	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	20h
1.85V/cell	841.2	665.9	510.7	445.6	285.3	227.1	181.4	157.2	136.1	120.9	109.2	99.9	94.7	51.6
1.80V/cell	953.2	736.8	559.0	489.3	307.4	242.3	191.5	164.6	142.5	126.0	114.2	104.9	98.8	53.7
1.75V/cell	1058.6	801.1	597.6	519.9	324.7	255.5	200.1	170.2	146.9	130.2	117.6	107.9	100.6	54.7
1.70V/cell	1128.4	852.3	632.4	549.0	342.7	265.2	205.9	174.9	151.8	134.3	120.9	110.6	102.9	55.4
1.67V/cell	1159.7	874.5	649.5	564.5	349.7	272.6	210.5	178.1	153.8	135.9	122.3	111.8	103.9	55.9
1.60V/cell	1242.7	928.2	693.9	596.4	362.0	282.1	217.6	183.0	157.1	138.4	124.3	114.0	105.8	56.6

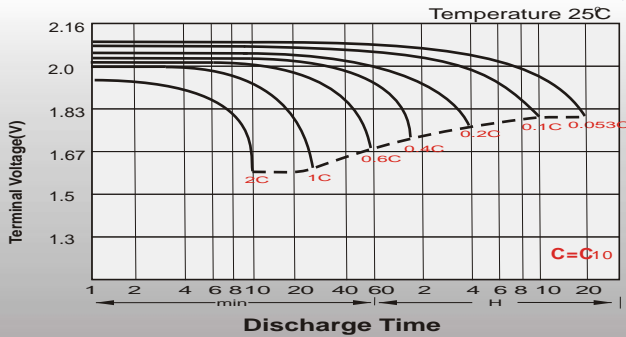
Dimensions

T11 Terminal

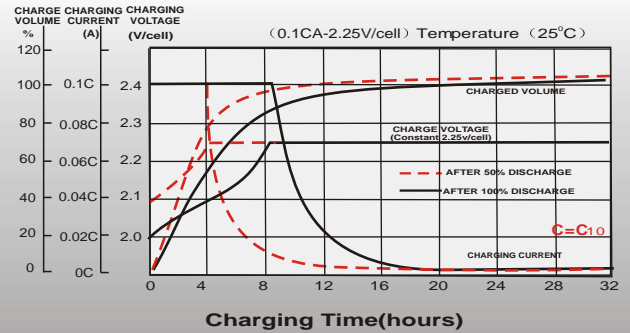
Unit: mm [inches]



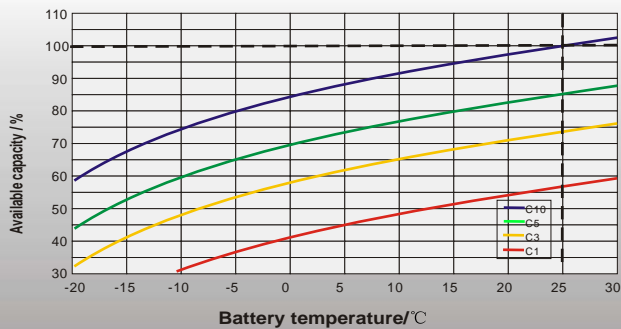
Discharge Characteristics



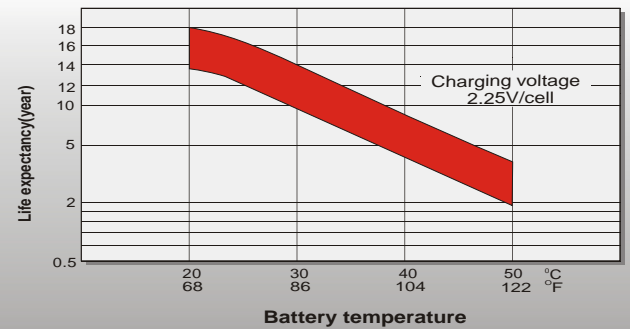
Float Charging Characteristics



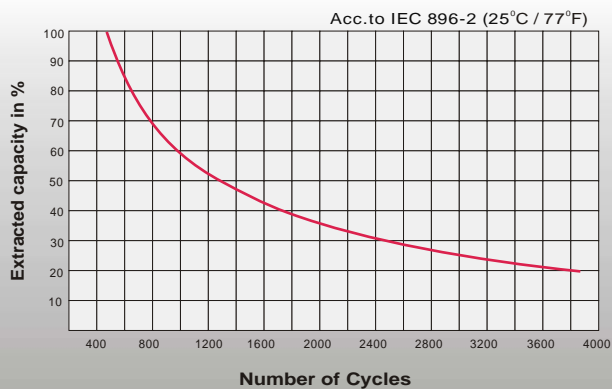
Temperature Effects in Relation to Battery Capacity



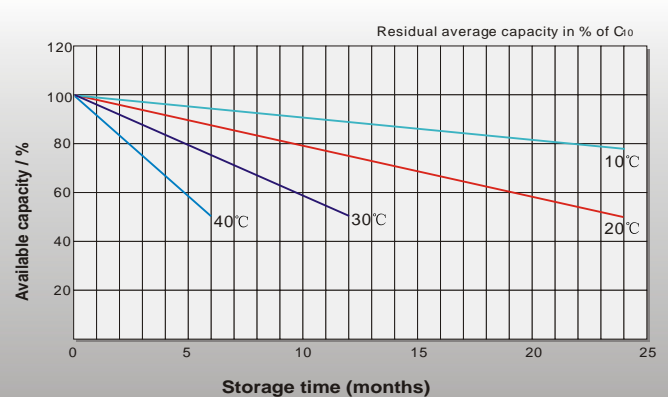
Effect of Temperature on Long Term Float Life



Cycle Life in Relation to Depth of Discharge



General Relation of Capacity VS. Storage Time



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