

LPGS SERIES -TRUE Hybrid GEL Battery

LPGS12-33(12V33AH)

Specification

Nominal Voltage	12V	
Nominal Capacity(20HR)	33.0AH	
Dimensions	Length	195±2mm (7.68 inches)
	Width	130±2mm (5.12 inches)
	Container Height	164±2mm (6.46 inches)
	Total Height (with Terminal)	167±2mm (6.57 inches)
Approx Weight	Approx 10.5kg (23.2lbs)	
Terminal	T6	
Container Material	ABS	
Rated Capacity	33.0 AH/1.65A	(20hr , 1.80V/cell,25°C/77°F)
	30.6 AH/3.06A	(10hr, 1.80V/cell,25°C/77°F)
	27.8 AH/5.56A	(5hr, 1.75V/cell,25°C/77°F)
	24.6 AH/8.20A	(3hr, 1.75V/cell,25°C/77°F)
	20.4 AH/20.4A	(1hr, 1.60V/cell,25°C/77°F)
Max. Discharge Current	420A (5s)	
Internal Resistance	Approx 12mΩ	
Operating Temp.Range	Discharge : -15~50°C (5~122°F)	
	Charge : 0~40°C (32~104°F)	
	Storage : -15~40°C (5~104°F)	
Nominal Operating Temp. Range	25±3°C (77±5°F)	
Cycle Use	Initial Charging Current less than 8.3A.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	Leoch LPGS 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

- ◆ All purpose
- ◆ Uninterruptable Power Supply (UPS)
- ◆ Electric Power System (EPS)
- ◆ Emergency backup power supply
- ◆ Emergency light
- ◆ Railway signal
- ◆ Aircraft signal
- ◆ Alarm and security system
- ◆ Electronic apparatus and equipment
- ◆ Communication power supply
- ◆ DC power supply
- ◆ Auto control system

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	57.9	44.4	36.8	31.8	24.8	18.5	15.6	9.53	7.36	6.04	5.08	4.33	3.47	2.94	1.61
1.80V/cell	76.5	56.0	43.8	37.1	28.5	21.1	17.4	10.36	7.91	6.43	5.38	4.58	3.66	3.06	1.65
1.75V/cell	88.1	62.8	48.9	40.7	30.4	22.3	18.3	10.86	8.20	6.66	5.56	4.72	3.74	3.12	1.68
1.70V/cell	98.1	69.2	52.7	43.3	32.1	23.4	19.2	11.31	8.48	6.85	5.72	4.86	3.82	3.20	1.70
1.65V/cell	107.2	74.0	55.6	45.5	33.6	24.1	19.7	11.55	8.79	7.06	5.84	4.95	3.89	3.25	1.72
1.60V/cell	119.1	80.8	59.8	48.9	35.7	25.5	20.4	12.02	9.10	7.29	6.04	5.07	3.94	3.30	1.74

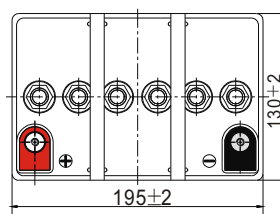
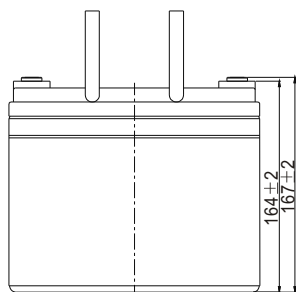
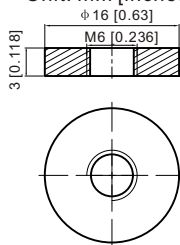
Constant Power Discharge (Watts/cell) at 25 °C (77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	109.1	84.0	70.0	60.8	47.7	35.9	30.4	18.6	14.4	11.88	10.02	8.57	6.90	5.86	3.21
1.80V/cell	141.7	104.3	82.1	70.1	54.4	40.6	33.6	20.2	15.4	12.59	10.58	9.05	7.26	6.08	3.29
1.75V/cell	159.8	115.0	90.3	76.0	57.4	42.5	35.4	21.1	16.0	13.00	10.89	9.29	7.41	6.21	3.34
1.70V/cell	174.5	124.6	96.0	79.9	60.2	44.4	36.7	21.8	16.5	13.34	11.17	9.54	7.55	6.35	3.39
1.65V/cell	187.4	131.1	99.7	83.1	62.3	45.4	37.5	22.2	17.0	13.71	11.39	9.69	7.67	6.44	3.42
1.60V/cell	204.1	140.5	105.6	88.3	65.6	47.6	38.7	23.0	17.5	14.11	11.75	9.89	7.75	6.53	3.45

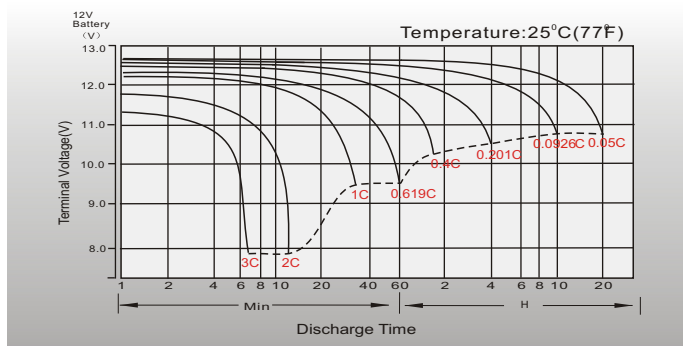
Dimensions

T6 Terminal

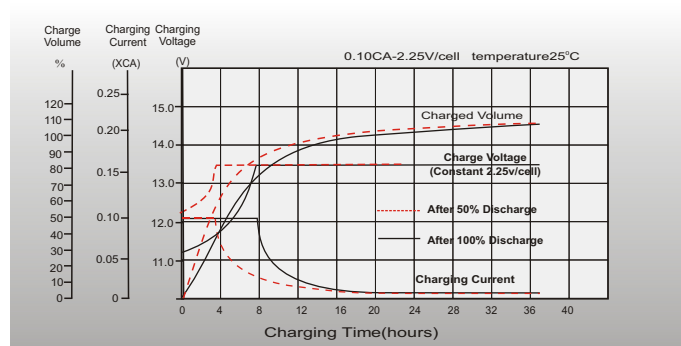
Unit: mm [inches]



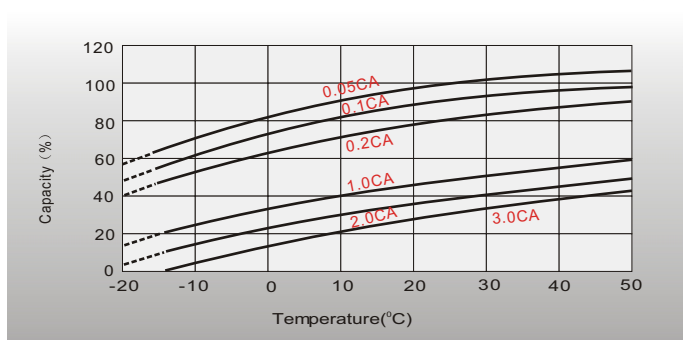
Discharge Characteristics



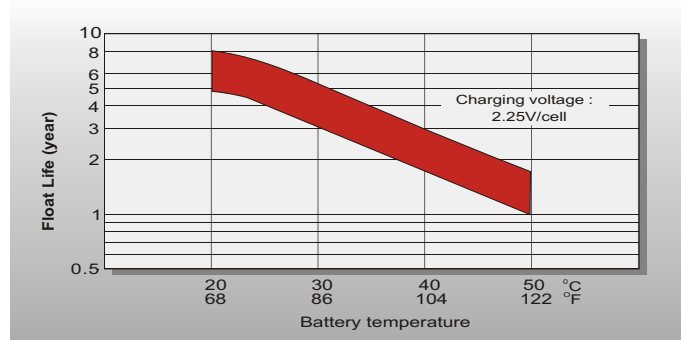
Float Charging Characteristics



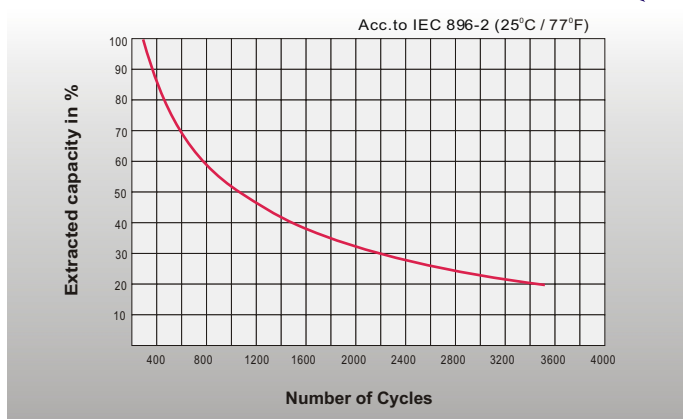
Temperature Effects in Relation to Battery Capacity



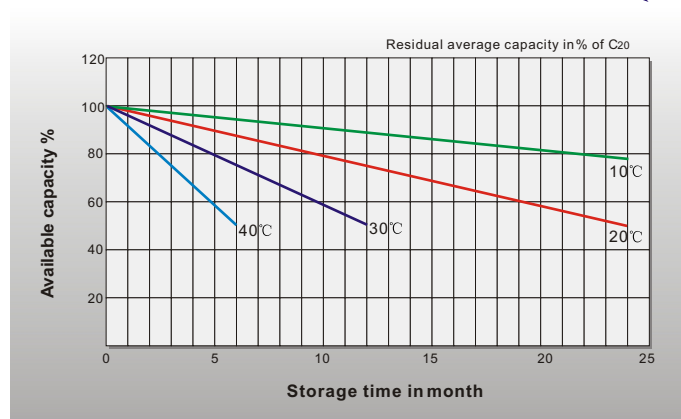
Effect of Temperature on Long Term Float Life



Cycle Life in Relation to Depth of Discharge



General Relation of Capacity VS. Storage Time



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