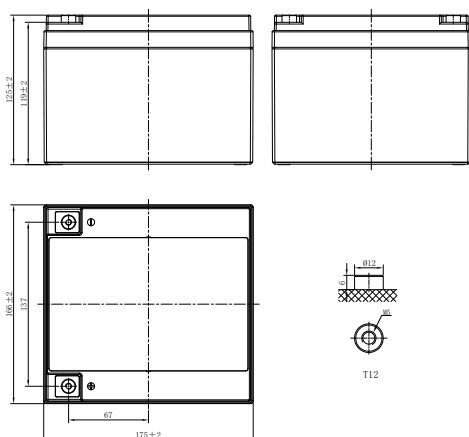


LPL SERIES-LONG LIFE STANDBY

LPL12-28 (12V28Ah)



CHARACTERISTICS

Item	Specifications	
Rated Voltage	12V	
Nominal Capacity (25°C)	C ₂₀ 1.75V/cell	28Ah
Dimension	Length	166mm (6.54inches)
	Width	175mm (6.89inches)
	Container Height	125mm (4.92inches)
	Total Height	125mm (4.92inches)
Approx Weight	8.20kg (18.1lbs)	
Terminal	T12/T12-I(M5)	
Container Material	ABS (UL94 HB or V-0 optional)	
Short-circuit current	700A	
Internal Resistance (25°C)	Approx 11 mΩ (Fully charged)	
Operating Temp. Range	Discharge	-15~50°C (5~122°F)
	Charge	-20~40°C (-4~104°F)
	Storage	-15~40°C (5~104°F)
Nominal Operating Temp. Range	25±3°C (77±5°F)	
Max.Charging Current (25°C)	0.3C	
Charge voltage (25°C)	Standby Use	Cycle Use
	2.25-2.30V/cell	2.35-2.45V/cell
Temp. Coefficient	-3mV/cell/°C	-5mV/cell/°C
	40°C (104°F)	103%
Effect of temp. to Capacity	25°C (77°F)	100%
	0°C (32°F)	86%
Self Discharge	≤3% per month at 25°C (77°F). LPL series batteries may be stored up to 6 months at 25°C (77°F) and then a freshening charge is required. For higher temperatures the time interval will be shorter.	

DISCHARGE TABLE

Constant Current Discharge (Amperes) at 25°C (77°F)																
F.V/Time	5min	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	60.7	53.2	42.7	36.2	26.9	20.6	16.9	12.1	9.68	7.07	5.58	4.64	3.97	3.12	2.57	1.37
1.80V/cell	63.8	55.9	44.4	37.3	27.6	21.0	17.2	12.3	9.83	7.18	5.66	4.71	4.02	3.16	2.60	1.39
1.75V/cell	66.8	58.6	46.0	38.4	28.2	21.5	17.5	12.5	9.98	7.29	5.74	4.77	4.07	3.20	2.63	1.40
1.70V/cell	70.0	61.4	47.6	39.6	28.9	21.9	17.8	12.7	10.1	7.39	5.81	4.83	4.13	3.24	2.66	1.41
1.67V/cell	71.9	63.0	48.6	40.2	29.3	22.1	18.0	12.8	10.2	7.46	5.86	4.87	4.16	3.26	2.68	1.42
1.60V/cell	76.2	66.8	50.8	41.8	30.2	22.7	18.4	13.1	10.4	7.60	5.97	4.95	4.23	3.31	2.72	1.44
Constant Power Discharge (Watts/cell) at 25°C (77°F)																
F.V/Time	5min	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	118.8	101.8	82.0	69.6	52.0	40.0	32.8	23.6	19.0	13.9	11.0	9.17	7.86	6.19	5.11	2.74
1.80V/cell	124.0	106.3	84.8	71.5	53.1	40.7	33.3	23.9	19.2	14.1	11.1	9.28	7.95	6.26	5.16	2.77
1.75V/cell	129.4	110.9	87.4	73.2	54.1	41.3	33.8	24.2	19.4	14.3	11.3	9.39	8.04	6.33	5.22	2.80
1.70V/cell	134.6	115.4	90.0	75.1	55.1	42.0	34.3	24.6	19.7	14.4	11.4	9.49	8.13	6.40	5.28	2.83
1.67V/cell	137.8	118.1	91.7	76.2	55.7	42.3	34.5	24.8	19.9	14.5	11.5	9.55	8.19	6.44	5.32	2.85
1.60V/cell	142.7	124.3	95.1	78.6	57.1	43.2	35.2	25.2	20.2	14.8	11.7	9.70	8.31	6.54	5.40	2.89

LPL SERIES-LONG LIFE STANDBY

LPL12-28 (12V28Ah)



APPLICATIONS

- UPS and EPS
- Emergency light
- Railway signal and aircraft signal system
- Marine and power stations
- Alarm and security system
- Electronic apparatus and equipment
- Communication power supply, DC power supply

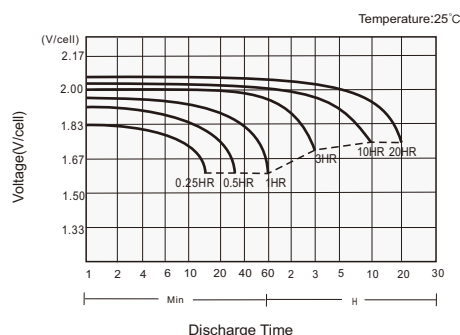
GENERAL FEATURES

- 10~12 years design life (25°C)
- Lead calcium alloy, sealed design, no watering required
- Puncture resistant micro-porous glass mat separators extend life
- Unique technology optimizes power capacity, cell consistency, and long-term reliability
- Designed for a wide range of applications

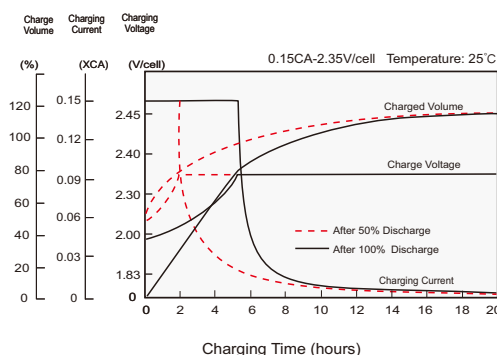
STANDARDS

- Compliance with IEC 60896 standards, EU Battery Directive
- UL, CE Approved
- Manufactured in Leoch® IATF 16949, ISO 45001, ISO 9001 and ISO 14001 certified production facilities

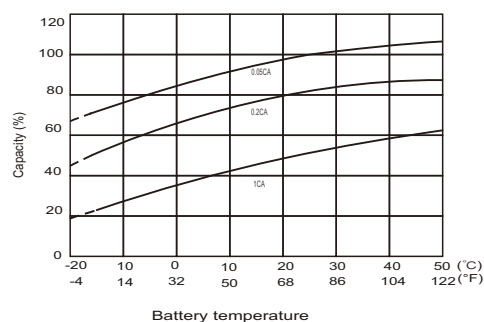
Discharge Characteristics



Charging Characteristics



Effects of Temperature on Capacity



Self Discharge Characteristics

