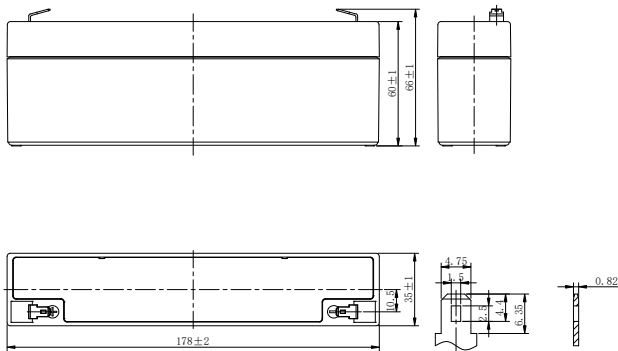


LP SERIES-GENERAL PURPOSE

LP12-1.9 (12V1.9Ah)



T1

CHARACTERISTICS

Item	Specifications	
Rated Voltage	12V	
Nominal Capacity (25°C)	$C_{20}, 1.75V/cell$	1.9Ah
Dimension	Length	178mm (7.01inches)
	Width	35mm (1.38inches)
	Container Height	60mm (2.36inches)
	Total Height	66mm (2.60inches)
Approx Weight	0.85kg (1.87lbs)	
Terminal	T1	
Container Material	ABS (UL94 HB or V-0 optional)	
Short-circuit current	53.2A	
Internal Resistance (25°C)	Approx 110 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	
Effect of temp. to Capacity	40°C (104°F)	103%
	25°C (77°F)	100%
	0°C (32°F)	86%
Self Discharge	≤3% per month at 25°C (77°F).	
	LP 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	5.30	3.31	2.71	2.18	1.62	1.21	1.10	0.813	0.648	0.474	0.383	0.326	0.279	0.220	0.176	0.093
1.80V/cell	5.70	3.51	2.84	2.26	1.67	1.24	1.13	0.830	0.660	0.482	0.389	0.331	0.284	0.223	0.178	0.094
1.75V/cell	6.01	3.65	2.94	2.33	1.71	1.27	1.15	0.846	0.672	0.490	0.394	0.335	0.287	0.226	0.180	0.095
1.70V/cell	6.29	3.80	3.04	2.39	1.75	1.30	1.17	0.860	0.682	0.497	0.400	0.340	0.290	0.228	0.182	0.096
1.67V/cell	6.51	3.91	3.11	2.44	1.78	1.32	1.19	0.871	0.690	0.502	0.403	0.343	0.293	0.230	0.183	0.097
1.60V/cell	6.91	4.07	3.22	2.51	1.83	1.35	1.22	0.890	0.704	0.511	0.411	0.348	0.297	0.233	0.185	0.098
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	10.0	6.31	5.19	4.19	3.12	2.34	2.15	1.59	1.27	0.932	0.755	0.644	0.553	0.436	0.349	0.186
1.80V/cell	10.7	6.64	5.41	4.33	3.21	2.40	2.19	1.62	1.29	0.946	0.765	0.653	0.561	0.442	0.353	0.188
1.75V/cell	11.1	6.86	5.56	4.43	3.27	2.44	2.23	1.64	1.31	0.958	0.774	0.660	0.566	0.447	0.356	0.190
1.70V/cell	11.5	7.08	5.71	4.53	3.34	2.49	2.26	1.67	1.33	0.971	0.783	0.668	0.572	0.451	0.360	0.192
1.67V/cell	11.8	7.24	5.83	4.62	3.39	2.52	2.29	1.68	1.34	0.979	0.790	0.673	0.577	0.454	0.362	0.193
1.60V/cell	12.3	7.45	5.99	4.73	3.47	2.57	2.33	1.71	1.36	0.994	0.802	0.682	0.584	0.460	0.367	0.195

LP SERIES-GENERAL PURPOSE

LP12-1.9 (12V1.9Ah)



APPLICATIONS

- Uninterruptable Power Supply (UPS)
- Electric Power System (EPS)
- Emergency backup power supply
- Alarm and security system
- Communication power supply
- DC power supply
- Auto control system

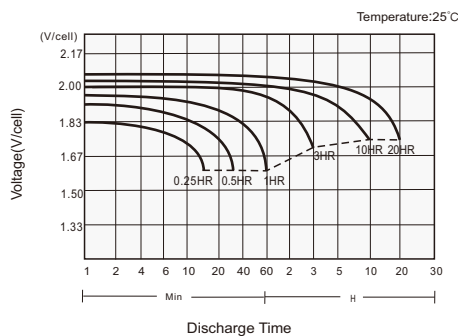
GENERAL FEATURES

- 5 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

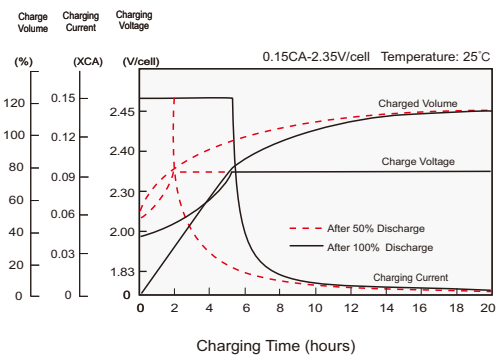
STANDARDS

- 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

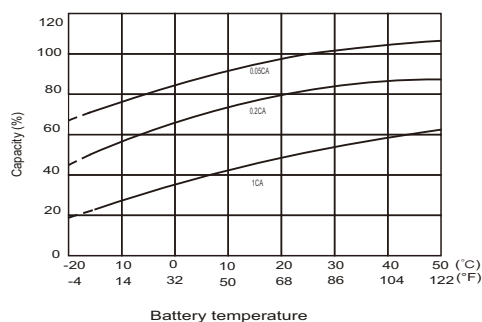
Discharge Characteristics



Charging Characteristics



Effects of Temperature on Capacity



Self Discharge Characteristics

