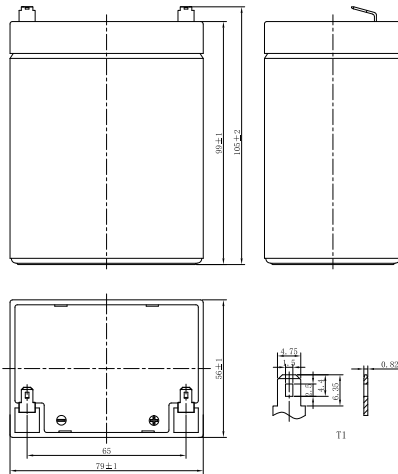


# LP SERIES-GENERAL PURPOSE

## LP12-2.9 (12V2.9Ah)



### CHARACTERISTICS

Item	Specifications	
Rated Voltage	12V	
Nominal Capacity (25°C)	C <sub>20</sub> , 1.75V/cell	2.9Ah
Dimension	Length	79mm (3.11inches)
	Width	56mm (2.20inches)
	Container Height	99mm (3.90inches)
	Total Height	105mm (4.13inches)
Approx Weight	1.10kg (2.43lbs)	
Terminal	T1/T2	
Container Material	ABS (UL94 HB or V-0 optional)	
Short-circuit current	81.2A	
Internal Resistance (25°C)	Approx 50 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	8.14	5.26	4.11	3.44	2.61	1.96	1.59	1.24	0.938	0.687	0.565	0.474	0.410	0.317	0.264	0.142
1.80V/cell	8.75	5.58	4.31	3.58	2.69	2.01	1.63	1.27	0.955	0.699	0.573	0.481	0.416	0.321	0.267	0.143
1.75V/cell	9.22	5.80	4.46	3.68	2.76	2.06	1.66	1.29	0.973	0.710	0.581	0.487	0.421	0.325	0.270	0.145
1.70V/cell	9.66	6.04	4.60	3.79	2.83	2.10	1.70	1.31	0.987	0.720	0.589	0.494	0.426	0.328	0.273	0.146
1.67V/cell	10.0	6.21	4.72	3.86	2.88	2.14	1.72	1.33	1.00	0.727	0.595	0.498	0.430	0.331	0.275	0.147
1.60V/cell	10.6	6.47	4.88	3.98	2.96	2.19	1.76	1.36	1.02	0.741	0.605	0.506	0.436	0.336	0.278	0.149
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	15.4	10.0	7.87	6.63	5.05	3.80	3.10	2.42	1.84	1.35	1.11	0.936	0.811	0.628	0.524	0.284
1.80V/cell	16.4	10.5	8.21	6.86	5.18	3.89	3.16	2.47	1.87	1.37	1.13	0.948	0.822	0.637	0.531	0.287
1.75V/cell	17.1	10.9	8.43	7.01	5.29	3.96	3.22	2.51	1.89	1.39	1.14	0.959	0.831	0.643	0.536	0.290
1.70V/cell	17.7	11.3	8.66	7.18	5.40	4.04	3.26	2.54	1.92	1.41	1.15	0.971	0.839	0.649	0.541	0.292
1.67V/cell	18.2	11.5	8.84	7.31	5.48	4.09	3.31	2.57	1.94	1.42	1.16	0.978	0.846	0.654	0.544	0.295
1.60V/cell	18.9	11.8	9.08	7.49	5.60	4.16	3.37	2.61	1.97	1.44	1.18	0.991	0.856	0.663	0.551	0.298

# LP SERIES-GENERAL PURPOSE

## LP12-2.9 (12V2.9Ah)



### 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

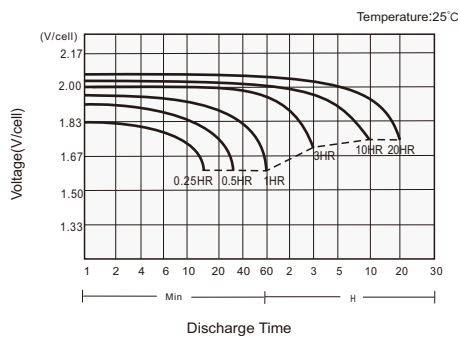
### GENERAL FEATURES

- 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

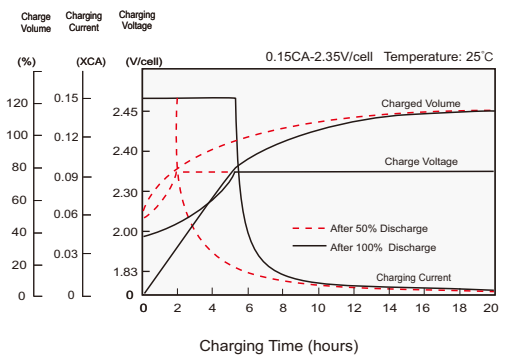
### STANDARDS

- 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

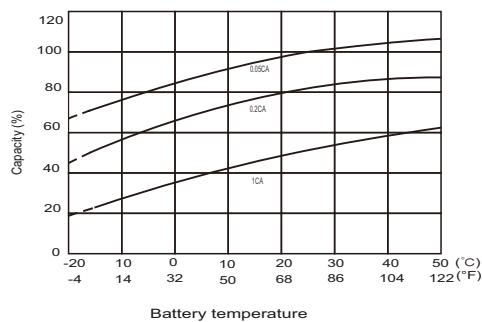
#### Discharge Characteristics



#### Charging Characteristics



#### Effects of Temperature on Capacity



#### Self Discharge Characteristics

