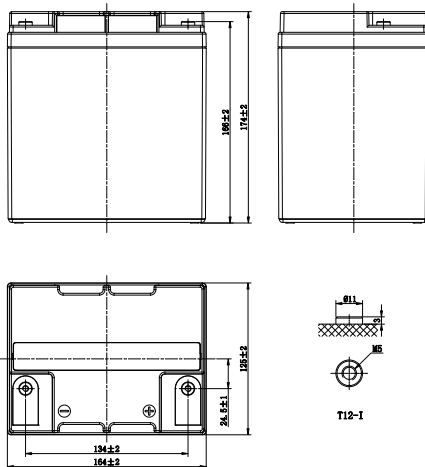


# LP SERIES-GENERAL PURPOSE

## LP12-28H (12V28Ah)



### CHARACTERISTICS

Item	Specifications	
Rated Voltage	12V	
Nominal Capacity (25°C)	C <sub>20</sub> , 1.75V/cell	28Ah
Dimension	Length	164mm(6.46inches)
	Width	125mm(4.92inches)
	Container Height	174mm(6.85inches)
	Total Height	174mm(6.85inches)
Approx Weight	8.35kg(18.4lbs)	
Terminal	T12/T12-I(M5)	
Container Material	ABS (UL94 HB or V-0 optional)	
Short-circuit current	700A	
Internal Resistance (25°C)	Approx 15 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	75.3	55.0	45.7	38.4	28.4	20.1	15.9	12.0	9.18	6.91	5.62	4.63	4.02	3.13	2.54	1.37
1.80V/cell	80.9	58.3	48.0	39.9	29.3	20.6	16.3	12.2	9.35	7.03	5.70	4.70	4.08	3.18	2.57	1.38
1.75V/cell	85.3	60.7	49.6	41.1	30.0	21.0	16.6	12.5	9.52	7.14	5.78	4.76	4.13	3.21	2.60	1.40
1.70V/cell	89.3	63.1	51.2	42.2	30.8	21.5	17.0	12.7	9.66	7.24	5.86	4.83	4.18	3.24	2.63	1.41
1.67V/cell	92.4	64.9	52.5	43.1	31.4	21.9	17.2	12.8	9.77	7.31	5.92	4.87	4.22	3.27	2.65	1.42
1.60V/cell	98.0	67.6	54.3	44.4	32.2	22.4	17.6	13.1	9.96	7.45	6.02	4.94	4.28	3.31	2.68	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	142.4	104.7	87.6	74.0	54.9	38.9	31.0	23.4	18.0	13.6	11.1	9.15	7.95	6.21	5.05	2.74
1.80V/cell	151.6	110.2	91.3	76.5	56.4	39.8	31.6	23.8	18.3	13.8	11.2	9.27	8.07	6.29	5.11	2.77
1.75V/cell	158.0	113.8	93.8	78.2	57.6	40.5	32.2	24.2	18.5	14.0	11.4	9.37	8.15	6.35	5.16	2.80
1.70V/cell	163.8	117.5	96.3	80.1	58.8	41.3	32.6	24.5	18.8	14.1	11.5	9.46	8.23	6.41	5.21	2.82
1.67V/cell	168.1	120.2	98.4	81.5	59.7	41.8	33.1	24.8	18.9	14.3	11.6	9.56	8.30	6.46	5.24	2.84
1.60V/cell	174.9	123.7	101.1	83.5	61.0	42.6	33.7	25.2	19.3	14.5	11.8	9.69	8.40	6.54	5.31	2.88

# LP SERIES-GENERAL PURPOSE

## LP12-28H (12V28Ah)



### 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

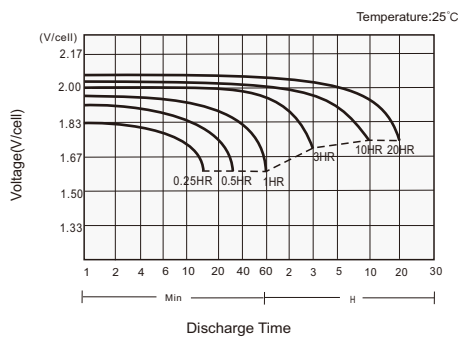
### GENERAL FEATURES

- 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

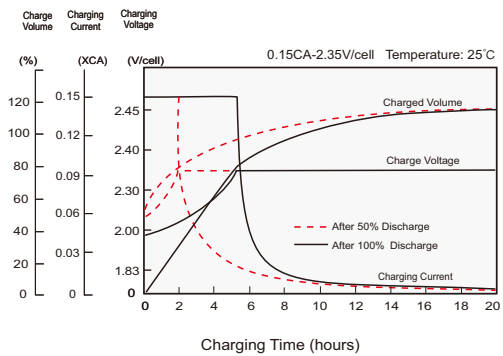
### STANDARDS

- 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

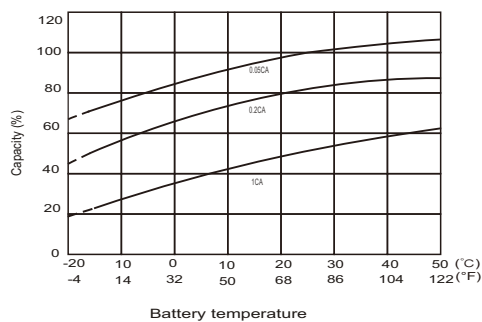
#### Discharge Characteristics



#### Charging Characteristics



#### Effects of Temperature on Capacity



#### Self Discharge Characteristics

