



# XP Series-Ultra High Rate

## XP12-810(12V810W)

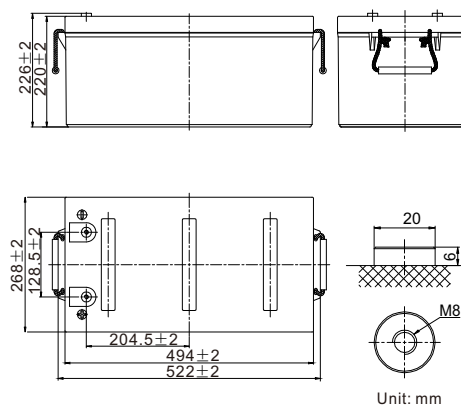


### Specifications

Rated Voltage	12V	
Nominal Rate ( $W_{15}, 1.67V/cell$ )	810.0W/cell	
Nominal Capacity( $C_{20}, 1.80V/cell$ )	250Ah	
Dimension	Length	522±2mm (20.55 inches)
	Width	268±2mm (10.55 inches)
	Container Height	220±2mm (8.66 inches)
	Total Height	226±2mm (8.90 inches)
Approx. Weight	72.5 Kg (159.8 lbs)	
Terminal	T11	
Container Material	ABS	
Rated Capacity (25°C)	262.0 Ah	(20hr, 13.1A, 1.80V/cell)
	250.0 Ah	(10hr, 25.0A, 1.80V/cell)
	219.0 Ah	(5hr, 43.8A, 1.75V/cell)
	192.6 Ah	(3hr, 64.2A, 1.75V/cell)
	149.9 Ah	(1hr, 149.9A, 1.67V/cell)
Max. Discharge Current	2500A	
Internal Resistance (25°C)	Approx. 2.5mΩ	
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)	
Max. Charging Current(25°C)	75.0A	
Charge voltage(25°C)	Float	13.5V
	Temp. Coefficient	-3mV/cell/°C
	Equalization	14.1~14.4V
Effect of temp. to Capacity	40°C (104°F)	103%
	25°C (77°F)	100%
	0°C (32°F)	86%
Self Discharge	≤3%/month @ 25°C	



### Layout



### Constant Current Discharge (Amperes) at 25 °C (77°F)

F.V/Time	15min	20min	30min	1h	1.5h	2h	3h	4h	5h	8h	10h	20h
1.85V/cell	357.4	302.5	223.8	123.4	98.8	79.1	57.8	47.5	39.7	28.0	23.4	12.3
1.80V/cell	399.7	338.3	250.3	136.6	108.1	86.0	62.5	51.2	42.8	30.0	25.0	13.1
1.75V/cell	426.4	360.9	267.0	141.6	111.7	88.7	64.2	52.5	43.8	30.5	25.4	13.3
1.70V/cell	448.5	379.6	280.8	146.8	115.5	91.5	66.1	53.8	44.7	31.1	25.8	13.5
1.67V/cell	455.7	385.7	285.3	149.9	117.6	93.0	67.1	54.6	45.3	31.4	26.0	13.7
1.60V/cell	462.2	391.2	289.4	157.2	122.8	96.9	69.6	56.4	46.7	32.2	26.6	14.0

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

F.V/Time	15min	20min	30min	1h	1.5h	2h	3h	4h	5h	8h	10h	20h
1.85V/cell	643.1	544.3	402.7	264.0	198.6	158.3	119.9	98.8	84.3	59.8	50.0	26.3
1.80V/cell	719.3	608.7	450.4	278.2	207.1	166.3	124.8	102.6	87.2	61.1	51.2	26.9
1.75V/cell	767.3	649.4	480.4	294.1	218.5	173.1	129.5	106.0	89.9	62.1	51.6	27.1
1.70V/cell	807.1	683.1	505.4	304.2	225.5	178.7	132.7	108.4	91.4	62.8	52.0	27.3
1.67V/cell	820.0	694.0	513.4	313.4	232.0	183.4	136.2	110.3	92.6	63.4	52.4	27.5
1.60V/cell	831.7	703.9	520.8	320.5	236.6	186.8	137.4	111.4	94.0	64.1	53.1	27.9



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## XP12-810(12V810W)



### Applications

- UPS
- Hospitals & Testing Laboratories
- Emergency Power Supply
- Electric starting
- Telecommunications
- Data Centers

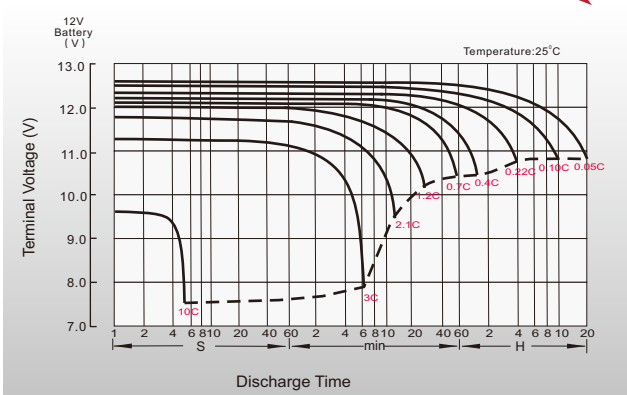
### General Features

- Special designed grids for optimized high power density
- Oversized partition intercell welds, providing low resistance connections & minimal power loss
- Advanced lead tin calcium alloy, reduces grid corrosion & promotes long battery life
- Performance excels at high rates of discharge & recharge
- High integrity post seal for long life

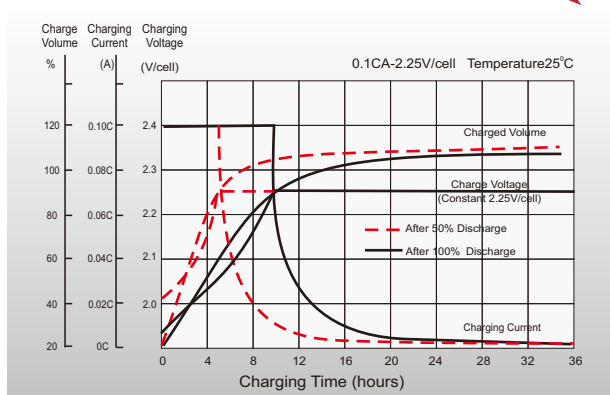
### Standards

- Compliance with IEC 60896 standards
- Classified as "Very Long Life" according to Eurobat
- CE, UL Certified
- Manufactured in Leoch®TS16949, OHSAS 18001, ISO 9001 and ISO 14001 certified production facilities

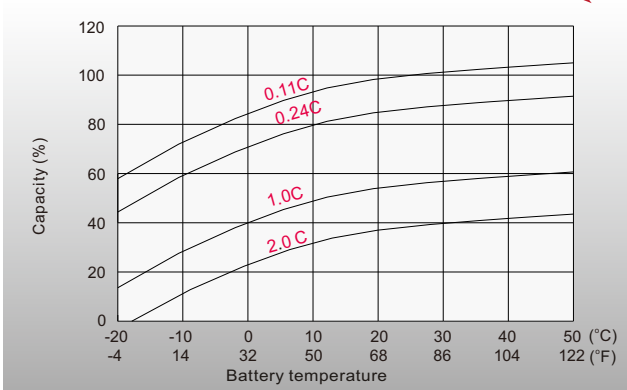
### Discharge Characteristics



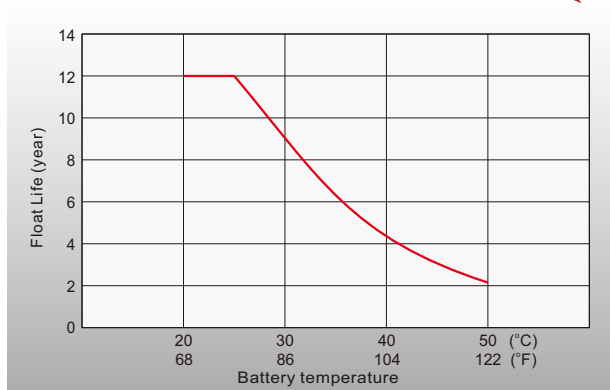
### Float Charging Characteristics



### Temperature Effects in Relation to Battery Capacity



### Temperature Effects on Long Term Float Life



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Publication No.: LB-XP12-810-PD-EN-V2.0-201811