



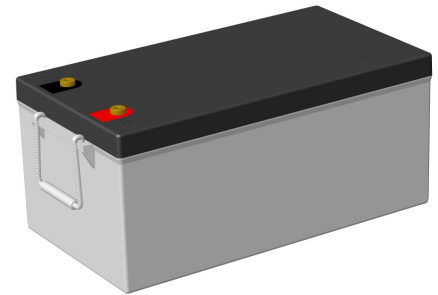
# XP Series-Ultra High Rate

## XP12-810(12V810W)

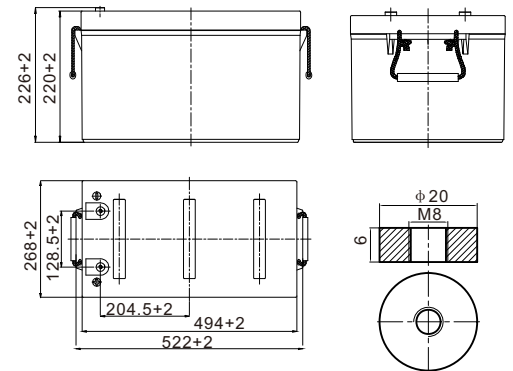


### Specifications

Rated Voltage	12V		
Nominal Rate( $W_{15}, 1.67V/cell$ )	810W		
Nominal Capacity( $C_{10}, 1.80V/cell$ )	230Ah		
Dimension	Length	522±2mm (20.6 inches)	
	Width	268±2mm (10.6 inches)	
	Container Height	220±2mm (8.66 inches)	
	Total Height	226±2mm (8.90 inches)	
Approx Weight	74.1kg (163.4 lbs)		
Terminal	M8		
Container Material	ABS: UL 94 HB or V-0 optional		
Rated Capacity(25°C)	230.0 Ah	C10(23.0A, 1.80V/cell)	
	213.6 Ah	C8(26.7A, 1.80V/cell)	
	202.5 Ah	C5(40.5A, 1.75V/cell)	
	197.1 Ah	C3(59.7A, 1.75V/cell)	
	146.4 Ah	C1(146.4A, 1.60V/cell)	
Max. Discharge Current	2300A (5s)		
Internal Resistance(25°C)	Approx 2.5mΩ		
Operating Temp. Range	Discharge	-20 ~ 55°C (-4 ~ 131°F)	
	Charge	-20 ~ 40°C (-4 ~ 104°F)	
	Storage	-15 ~ 50°C (5 ~ 122°F)	
Nominal Operating Temp. Range	25±3°C (77±5°F)		
Max.Charging Current(25°C)	57.5A		
Charge voltage(25°C)	Float	Charge voltage	Temp. Coefficient
	Equalization		
Effect of temp. to Capacity	40°C (104°F)	2.25 ~ 2.30V/cell	-3mV/cell/°C
	25°C (77°F)	2.30~2.40V/cell	-4mV/cell/°C
	0°C (32°F)		
Self Discharge	≤3%/month @ 25°C		



### Layout



### 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	8h	10h
1.85V/cell	490.5	391.6	339.5	267.0	188.4	140.9	126.6	93.0	76.0	56.6	44.8	37.9	26.2	22.4
1.80V/cell	557.9	444.5	384.8	301.9	212.4	150.5	130.8	95.8	80.5	58.5	46.4	39.4	26.7	23.0
1.75V/cell	605.9	482.1	416.5	325.9	228.5	157.5	136.2	99.7	83.6	59.7	48.0	40.5	27.0	23.1
1.70V/cell	647.8	514.0	442.4	345.6	242.2	163.1	142.2	103.9	85.6	61.1	49.1	41.4	27.4	23.2
1.67V/cell	670.4	530.3	455.3	355.0	248.0	171.2	143.7	106.6	87.6	62.4	49.8	42.0	27.7	23.6
1.60V/cell	694.1	548.4	469.4	364.1	254.0	180.7	146.4	110.2	89.3	64.0	50.9	42.8	27.8	23.7

### 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	8h	10h
1.85V/cell	916.1	736.7	642.9	507.9	360.0	270.8	244.8	180.2	147.9	110.6	87.8	74.6	51.9	44.5
1.80V/cell	1024.8	824.1	719.1	568.1	402.7	287.5	251.7	184.6	155.8	113.8	90.7	77.2	52.9	45.7
1.75V/cell	1093.7	879.6	767.5	606.3	429.8	299.0	260.9	191.4	161.1	115.9	93.4	79.2	53.2	45.8
1.70V/cell	1149.8	924.7	806.9	637.4	451.9	307.5	270.8	198.4	164.3	118.0	95.3	80.7	54.0	46.1
1.67V/cell	1168.5	939.7	810.0	647.8	459.2	321.0	272.3	202.6	167.5	120.0	96.2	81.5	54.5	46.7
1.60V/cell	1184.9	952.9	831.5	656.9	465.6	335.7	275.3	208.0	169.7	122.4	98.0	82.7	54.7	46.9



# XP Series-Ultra High Rate

## XP12-810(12V810W)



### Applications

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

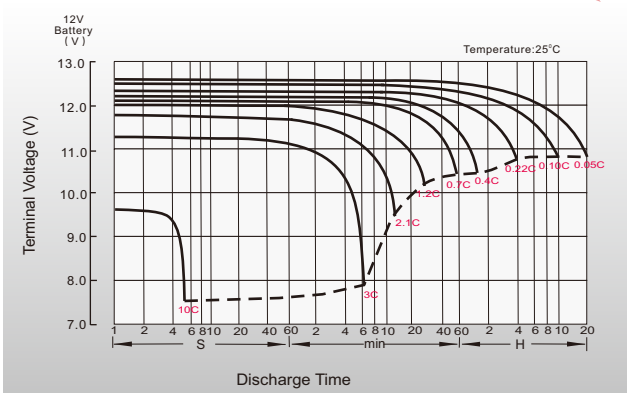
### General Features

- 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

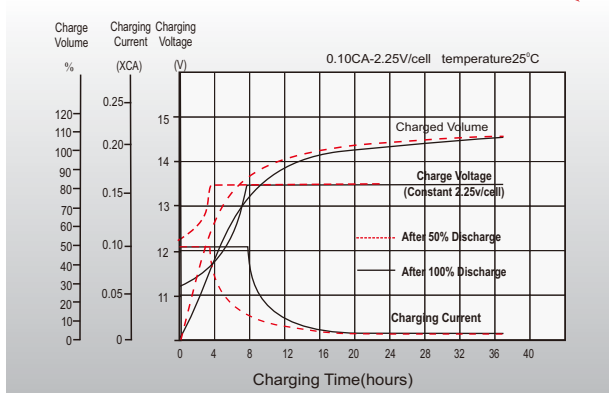
### Standards

- 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

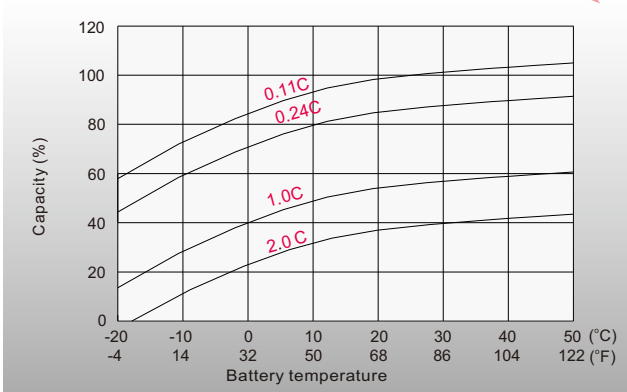
### Discharge Characteristics



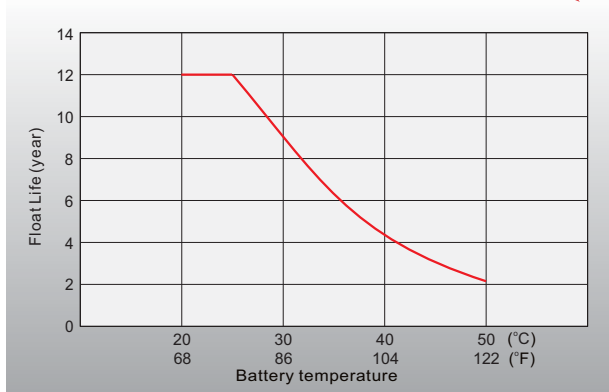
### Float Charging Characteristics



### Temperature Effects in Relation to Battery Capacity



### Effect of Temperature on Long Term Float Life



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