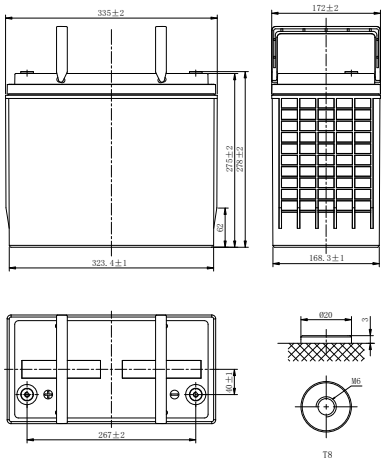
XP SERIES-ULTRA HIGH RATE

XP12-540 (12V540W)

LEOCH BATTERY



CHARACTERISTICS

Item		Specifications
Rated Voltage		12V
Nominal Rate (25˚C)	W_{15},1.67V/cell	540W/cell
Nominal Capacity (25˚C)	C_{20},1.80V/cell	155Ah
Dimension	Length	335mm (13.2inches)
	Width	172mm (6.77inches)
	Container Height	275mm (10.8inches)
	Total Height	278mm (10.9inches)
Approx Weight		42.4kg (93.5lbs)
Terminal		T8(M6)
Container Material		ABS (UL94 HB or V-0 optional)
Short-circuit current		2499A
Internal Resistance (25˚C)		Approx 3.8 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)		0.25C
Charge voltage (25˚C)	Standby Use	Equalization Use
	2.25-2.30V/cell	2.30-2.40V/cell
Temp. Coeffcient	-3mV/cell/˚C	-4mV/cell/˚C
Effect of temp. to Capacity	40˚C (104°F)	106%
	25˚C (77°F)	100%
	0˚C (32°F)	86%
Self Discharge	≤3% per month at 25°C (77°F)	

DISCHARGE TABLE

Constant Current Discharge (Amperes) at 25°C (77°F)															
F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	282.7	229.7	197.9	173.4	139.3	106.0	87.0	51.5	37.2	29.6	24.6	21.4	17.1	14.3	7.57
1.80V/cell	327.4	254.0	218.0	192.0	151.7	114.1	92.1	54.0	38.8	30.7	25.5	22.1	17.6	14.7	7.75
1.75V/cell	381.3	284.1	241.7	207.9	162.8	121.1	97.3	56.3	40.1	31.5	26.1	22.6	17.9	15.0	7.93
1.70V/cell	425.9	312.2	265.5	225.9	174.3	127.9	102.0	58.2	41.2	32.3	26.7	23.0	18.3	15.3	8.06
1.67V/cell	466.9	344.0	289.1	240.4	181.8	133.3	105.6	60.1	42.4	33.1	27.3	23.5	18.7	15.5	8.15
1.60V/cell	502.7	372.2	305.0	253.4	191.1	138.9	109.5	61.7	43.2	34.0	28.0	24.2	19.1	15.9	8.36
Constant Power Discharge (Watts/cell) at 25°C (77°F)															
F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	537.7	441.9	383.5	339.5	273.0	209.1	172.5	102.8	74.4	59.5	49.8	43.5	34.9	29.5	15.6
1.80V/cell	615.4	484.6	418.6	373.2	295.0	223.2	181.3	106.8	77.1	61.2	51.1	44.4	35.6	30.0	15.9
1.75V/cell	710.1	534.9	459.8	400.9	314.2	235.1	190.2	110.7	79.2	62.5	52.0	45.2	36.1	30.4	16.2
1.70V/cell	785.4	582.5	500.2	432.4	334.1	246.5	197.9	113.6	80.8	63.8	53.0	45.8	36.7	30.9	16.4
1.67V/cell	852.0	635.1	540.1	456.6	346.4	255.5	203.8	116.8	82.8	65.0	53.9	46.6	37.2	31.2	16.5
1.60V/cell	898.8	672.8	559.7	471.1	356.4	261.2	207.5	117.7	82.9	65.5	54.3	47.1	37.5	31.3	16.6

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LEOCH BATTERY

APPLICATIONS

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

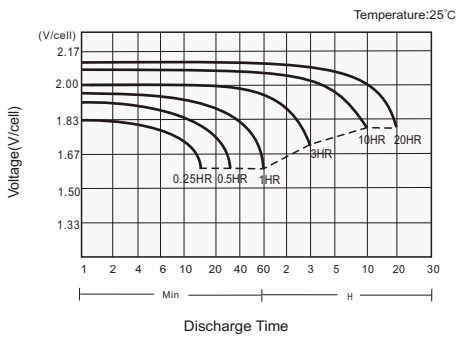
GENERAL FEATURES

- 12 years design life (25℃)
- Excellent high current performance - optimised for short discharge time
- Advanced AGM technology for superior high-rate power
- Long Life Alloy - minimizing grid growth, reducing gassing and extending battery life
- Epoxy-sealed posts eliminate leaks
- Optimal energy density - saves floor space

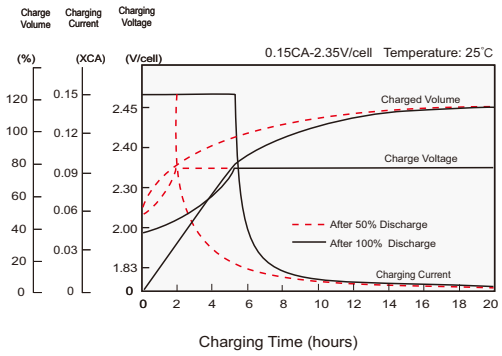
STANDARDS

- Compliance with IEC 60896 standards
- Classified as "Long Life" according to Eurobat
- CE,UL Approved
- Manufactured in Leoch®IATF 16949, ISO 45001,ISO 9001 and ISO 14001 certified production facilities

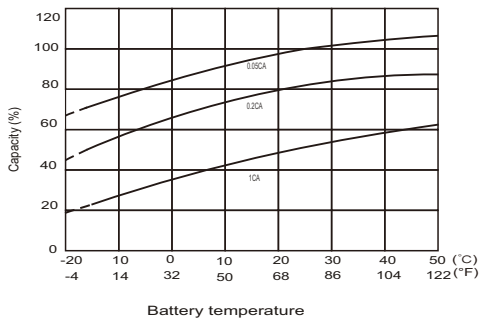
Discharge Characteristics



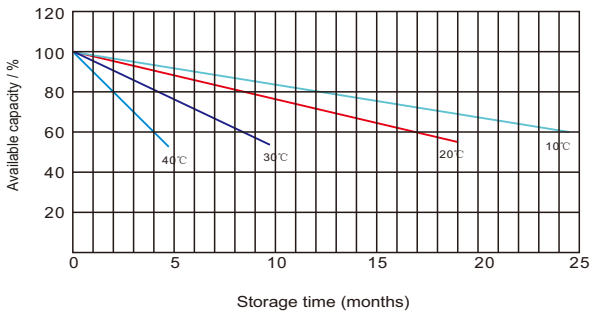
Charging Characteristics



Effects of Temperature on Capacity



Self Discharge Characteristics



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