



LP12-50 (12V 45Ah)

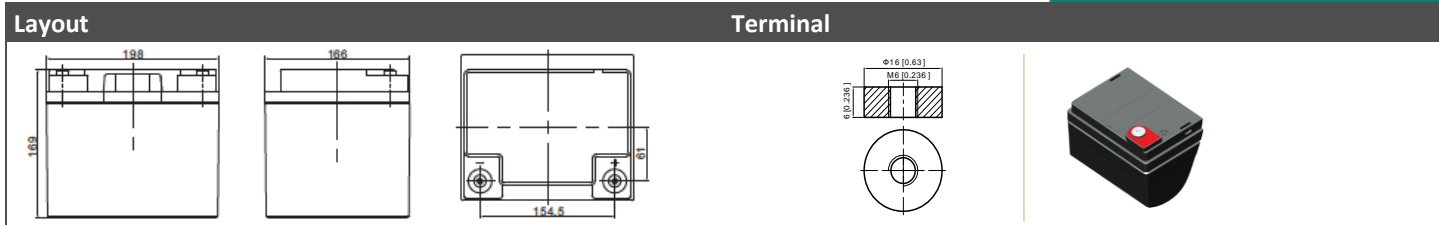
Specifications	
Cells Per Unit	6
Voltage Per Unit	12
Nominal Capacity	45Ah@10hour-rate to 1.80V per cell @25°C
Weight	Approx. 12.0 Kg (Tolerance±3.0%)
Dimensions	Length 198 mm
	Width 166 mm
	Container Height 169 mm
	Total Height 169 mm
Internal Resistance	Approx. 9.0 mΩ
Terminal	T6
Layout	0
Max. Discharge Current	450A (5 sec)
Short Circuit Current	1050A
Design Life	12 years (Float charging)
Max. Charging Current	13.5 A
Reference Capacity	C3 34.8AH
	C5 39.3AH
	C10 45.0AH
	C20 47.6AH
Standby Use Voltage	13.6 V~13.8 V @ 25°C Temperature Compensation: -3mV/°C /Cell
Cycle Use Voltage	14.6 V~14.8 V @ 25°C Temperature Compensation: -4mV/°C /Cell
Operating Temp. Range	Discharge: -20°C ~60°C
	Charge: 0°C ~50°C
	Storage: -20°C ~60°C
Nominal Operating Temp. Range	25°C ±5°C
Self Discharge	Valve Regulated Lead Acid (VRLA) batteries can be stored for up to 6 months at 25°C and then recharging is recommended. Monthly Self-discharge ratio is less than 3% at 25°C. Please charge batteries before using.
Container Material	A.B.S. UL94-HB, UL94-V0 Optional.



Description and Features

The LP Series AGM batteries have been specially developed to be widely applicable. These lead acid batteries with AGM technology are completely sealed and therefore 100% maintenance free and leak-proof. These batteries have a low self-discharge. The reliable and safe multipurpose batteries from the LP Series offer a long service life and can be used in various industries.

- Features**
- Absorbent Glass Mat technology
 - Reliable and safe performance
 - Long service life - 3-5 years in standby application (at 25°C)
 - Suitable for multipurpose applications



Constant Current Discharge Characteristics: A (25°C)												
F.V/Time	5Min	10 Min	15 Min	30 Min	1 Hr	2 Hr	3 Hr	4 Hr	5 Hr	8 Hr	10 Hr	20 Hr
1.60V	144.2	109.8	83.4	49.3	27.5	16.4	12.7	9.98	8.49	5.71	4.75	2.48
1.65V	139.0	103.8	79.8	47.3	26.6	15.9	12.3	9.71	8.27	5.64	4.69	2.44
1.70V	132.2	95.5	74.7	45.2	25.7	15.3	12.0	9.44	8.05	5.55	4.62	2.41
1.75V	123.5	87.5	69.5	43.2	24.7	14.8	11.6	9.20	7.85	5.48	4.56	2.38
1.80V	112.5	79.2	64.2	41.3	23.8	14.3	11.3	8.94	7.65	5.38	4.50	2.36
1.85V	99.0	64.7	53.3	35.6	21.3	13.1	10.4	8.31	7.13	5.05	4.24	2.24

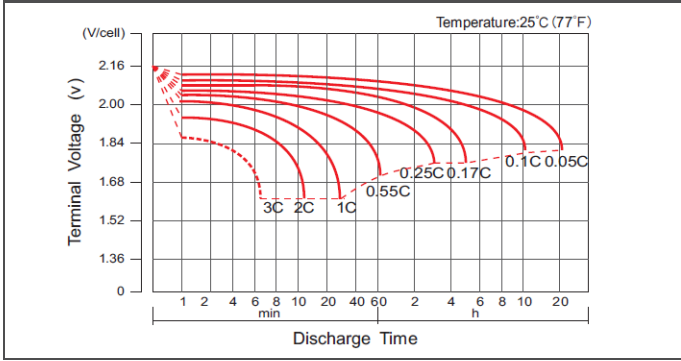
Constant Power Discharge Characteristics: Wpc (25°C)												
F.V/Time	5Min	10 Min	15 Min	30 Min	1 Hr	2 Hr	3 Hr	4 Hr	5 Hr	8 Hr	10 Hr	20 Hr
1.60V	248.1	186.7	145.9	89.5	51.7	31.0	24.2	19.2	16.4	11.1	9.33	4.89
1.65V	245.5	179.8	141.5	86.8	50.2	30.2	23.6	18.7	16.0	11.0	9.23	4.82
1.70V	236.1	168.6	134.5	83.8	48.9	29.4	23.1	18.3	15.6	10.9	9.10	4.77
1.75V	224.6	157.1	127.0	80.9	47.4	28.5	22.5	17.9	15.3	10.8	9.00	4.71
1.80V	208.2	144.7	118.9	78.1	45.8	27.6	21.9	17.4	15.0	10.6	8.89	4.67
1.85V	186.5	120.3	100.1	68.0	41.3	25.4	20.3	16.2	14.0	9.98	8.38	4.44

(Note) The above characteristics data are average values obtained within three charge/discharge cycle not the minimum values. The battery must be fully charged before the capacity test. The C10 should reach 95% after the first cycle and 100% after the third cycle.

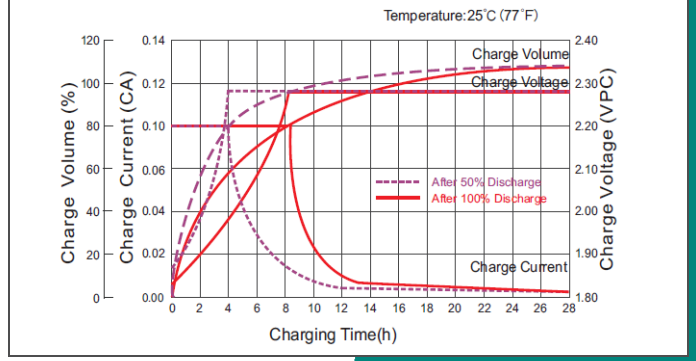


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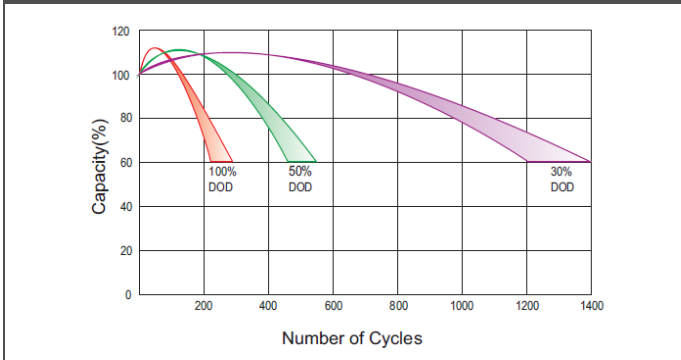
Charge Characteristic Curve



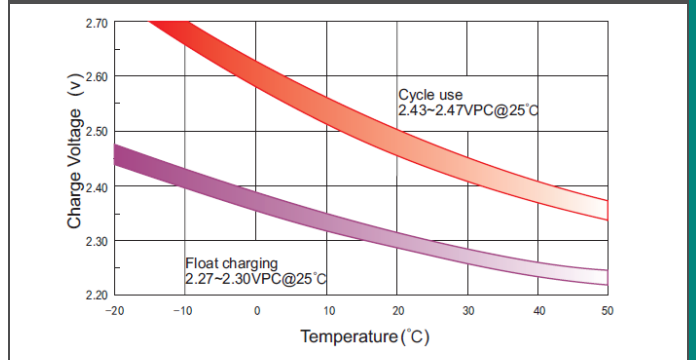
Charge Characteristic Curve For Standby Use



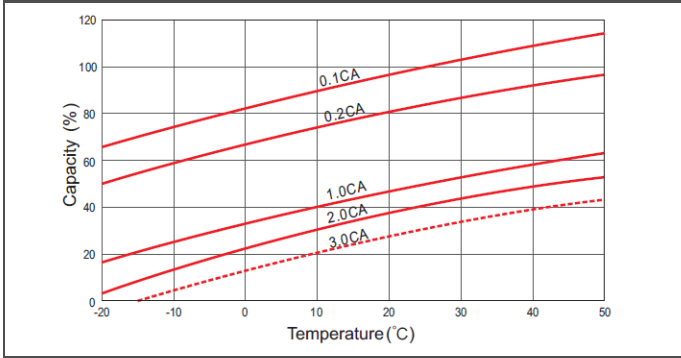
Cycle Life In Relation To Depth Of Discharge



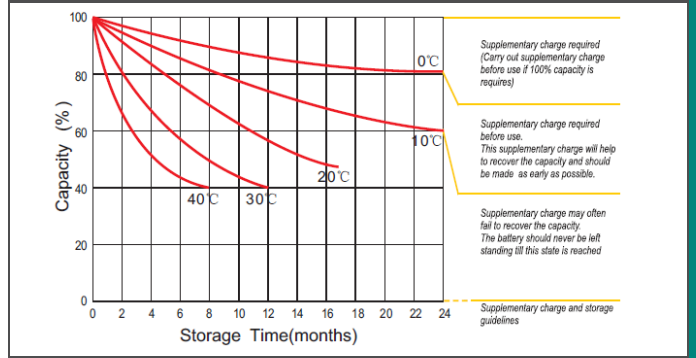
Relationship Between Charging Voltage And Temperature



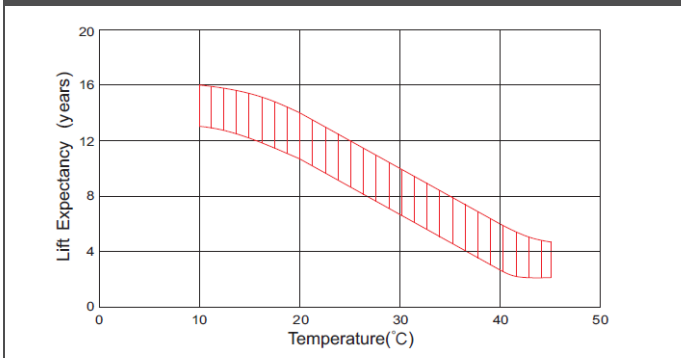
Temperature Effects On Capacity



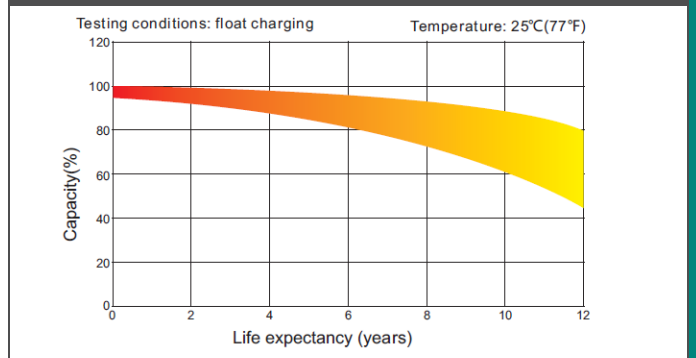
Storage Characteristics



Effect Of Temperature On Long Term Life



Life Characteristics Of Standby Use



(Note) All above information shall be changed without prior notice, Landport Batteries reserves the right to explain and update the latest information.