

UP-OPzV BLOCK SERIES

12V OPzV 200



ISO 9001



ISO 14001



OHSAS 18001



MH 28539



G4M20206-0910-E-16

OPzV BLOCK



SPECIFICATION

Cells Per Unit	6
Voltage Per Unit	2
Nominal Capacity	200 Ah @ 10hr-rate to 1.80 V per cell @ 25°C
Weight	Approx. 69.5 Kg (Tolerance ± 3.0%)
Internal Resistance	Approx. 5.5 mΩ
Terminal	F14 (M8)
Maximum Discharge Current	2000 A (5 sec)
Design Life	20 years (floating charge)
Maximum Charging Current	40.0 A
Reference Capacity	C3 157.0 Ah C5 176.0 Ah C10 200.0 Ah C20 214.2 Ah
Float Charging Voltage	13.5 V ~ 13.8 V @ 25°C Temperature Compensation: -3 mV / °C / Cell
Cycle Use Voltage	14.2 V ~ 14.4 V @ 25°C Temperature Compensation: -4 mV / °C / Cell
Operating Temperature Range	Discharge: -40°C ~ 60°C Charge: -20°C ~ 50°C Storage: -40°C ~ 60°C
Normal Operating Temperature Range	25°C ± 5°C
Self Discharge	UPOWER 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 2% at 20°C. Please charged batteries before using.
Container Material	A.B.S. UL94-HB, UL94-V0 Optional.



DIMENSIONS	
Length	521 ± 2mm (20.5 inches)
Width	268 ± 2mm (10.6 inches)
Height	220 ± 2mm (8.66 inches)
Total Height	225 ± 2mm (8.86 inches)
Torque Value	10 ~ 12 N*m

CONSTANT CURRENT DISCHARGE CHARACTERISTICS: A (25°C)										
F.V / Time	10min	15min	30min	1h	2h	3h	5h	8h	10h	20h
1.60V	327.3	262.7	173.9	119.8	74.20	57.51	37.81	25.46	21.40	11.24
1.65V	306.9	248.3	167.7	116.2	71.80	56.26	37.00	25.06	21.00	11.03
1.70V	280.6	231.4	160.3	112.3	69.40	54.39	36.20	24.66	20.60	10.82
1.75V	256.9	213.2	149.8	106.4	67.00	52.32	35.19	24.26	20.40	10.71
1.80V	223.9	190.7	139.2	100.0	63.80	50.03	33.99	23.66	20.00	10.50
1.85V	186.2	165.1	124.0	91.14	59.00	46.71	32.38	22.66	19.14	10.05

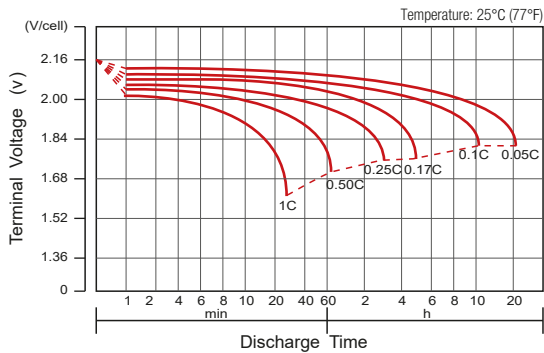
CONSTANT POWER DISCHARGE CHARACTERISTICS: WPC (25°C)										
F.V / Time	10min	15min	30min	1h	2h	3h	5h	8h	10h	20h
1.60V	513.4	426.0	319.6	227.0	141.8	110.7	73.60	50.33	42.20	22.16
1.65V	500.3	417.5	311.2	221.5	137.8	108.8	72.19	49.52	41.60	21.84
1.70V	474.8	401.2	300.5	215.6	134.0	105.5	70.79	48.92	41.00	21.53
1.75V	430.8	372.5	283.3	205.0	130.0	102.1	69.18	48.12	40.60	21.32
1.80V	370.6	337.6	265.8	193.6	124.2	97.57	66.77	46.92	39.80	20.90
1.85V	306.5	283.2	238.7	177.4	115.2	91.34	63.75	44.91	38.20	20.06

(Note) The above characteristics data are average values obtained within three charge/discharge cycle not the minimum values.

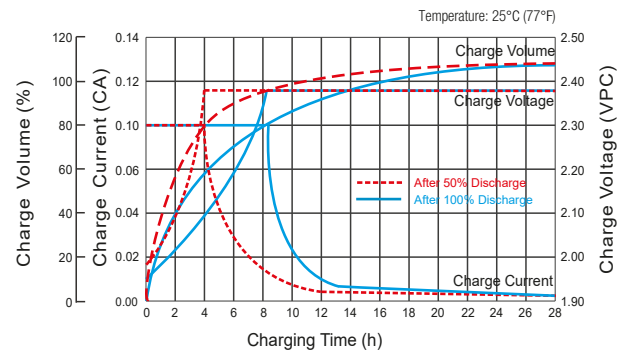
The battery must be fully charged before the capacity test. The C10 should reach 95% after the first cycle and 100% after the third cycle.



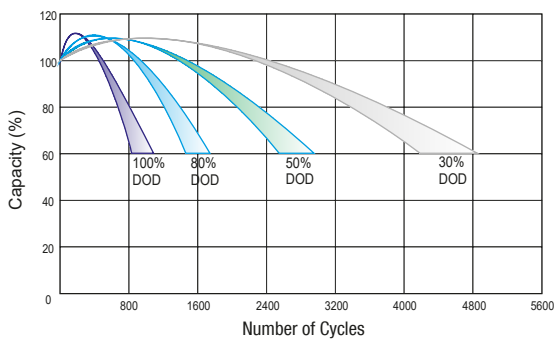
Discharge Characteristics Curve



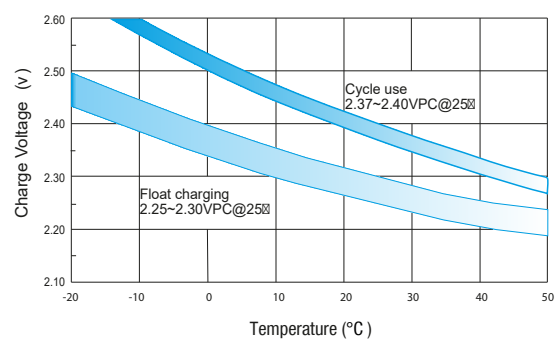
Charge Characteristic Curve for Cycle Use (IU)



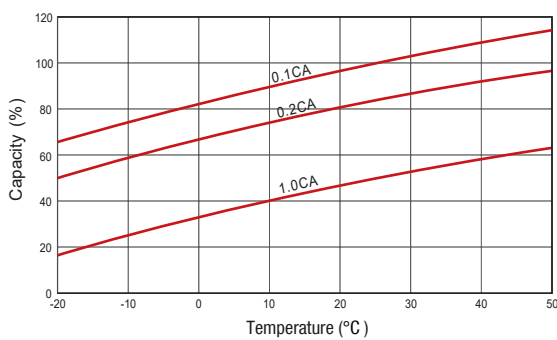
Cycle Life in Relation to Depth of Discharge



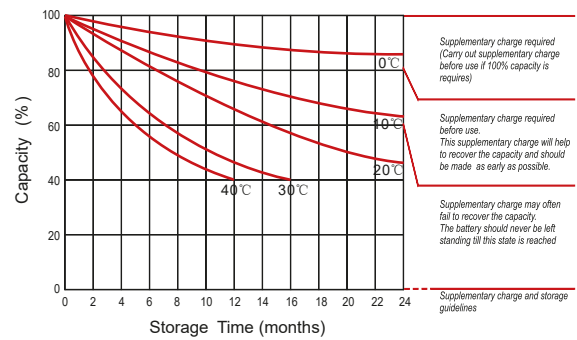
Relationship Between Charging Voltage and Temperature



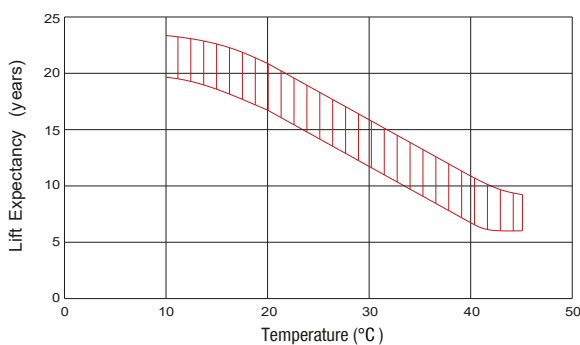
Temperature Effects on Capacity



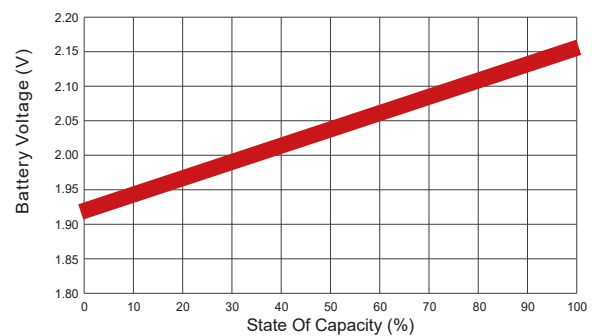
Storage Characteristics



Effect of Temperature on Long Term Life



Relationship of OCV And State of Charge (20°C)



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

