

DCG12-110

Gel VRLA
DCG Series - Deep Cycle Gel



Maintenance-free gel batteries with a thixotropic electrolyte deliver excellent deep-cycle endurance, enhanced safety, and strong vibration resistance. Built for harsh and higher temperature environments, they provide reliable cycling performance in applications such as medical devices, mobility equipment, and renewable energy systems.

Configuration Options

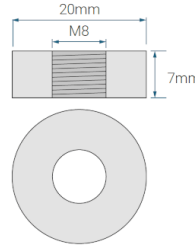
- DCG12-110 M8

Performance Specs

Nominal Voltage	12.0 Volts, (6.0 cells)
Nominal Capacity	
20-hr. (5.5A to 10.8 Volts)	110.0Ah
10-hr. (10.5A to 10.8 Volts)	105.0Ah
5-hr. (19.1A to 10.2 Volts)	95.5Ah
1-hr. (66.5A to 9.6 Volts)	66.5Ah
Approximate Weight	76.06lbs, (34.5kg)
Dimensions	L: 16.06in, 408.0mm
+/- 0.08 in. (+/- 2mm) for length, width, and height dimensions	W: 6.97in, 177.0mm
	H: 8.86in, 225.0mm
	TH: 8.86in, 225.0mm
Internal Resistance (approx.) mΩ	7.0mΩ
Max Short Circuit Discharge Current	1980.0A
Operating Temperature Range	
Charge	-4°F (-20°C) to 104°F (40°C)
Discharge	-4°F (-20°C) to 140°F (60°C)
Case	ABS (UL94 HB or V-0 optional)
Recommended Power-Sonic Charger	PSC-1212000ACX

Available Terminals (mm)

**T11 THREADED INSERT
 - 8mm STUD**



Graphs

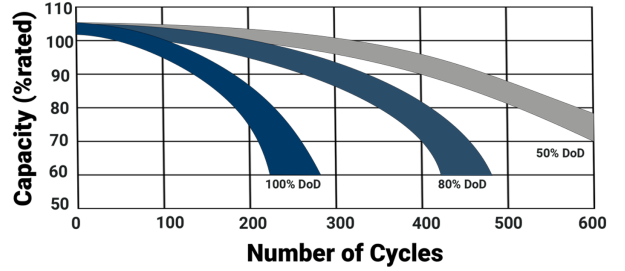
Capacity Retention SLA

CAPACITY RETENTION



PDC Cycle Life

CYCLE LIFE @25°C



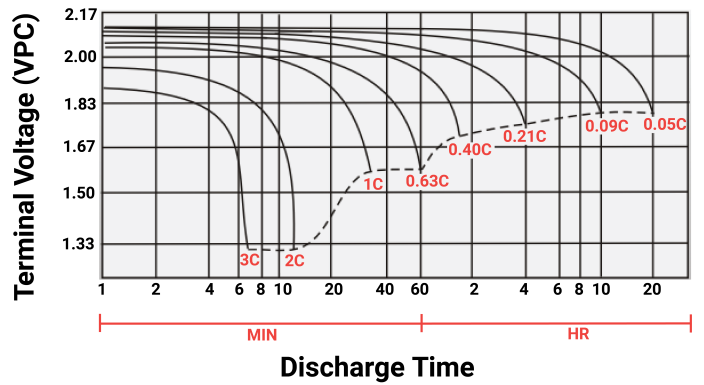
SLA Charging

CHARGING CHARACTERISTICS @ C/5 AND 25°C



SLA Discharge Rates

Discharge Characteristics



Constant Current

VoltageOverTime	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.60V/cell	213.5	163.8	138.0	105.6	79.5	66.5	48.0	38.8	29.4	23.2	19.8	17.2	13.4	11.1	5.97
1.65V/cell	192.4	150.3	128.4	100.3	76.6	65.1	47.6	38.4	29.0	22.9	19.6	17.0	13.3	11.02	5.94
1.67V/cell	191.4	149.5	127.5	99.6	75.8	64.4	47.0	38.3	28.9	22.8	19.5	16.9	13.2	11.0	5.93
1.70V/cell	182.0	143.8	123.2	96.9	74.3	63.3	46.1	37.5	28.5	22.4	19.1	16.6	13.1	10.9	5.85
1.75V/cell	166.6	133.8	115.9	92.6	71.7	61.2	44.4	36.0	27.7	22.1	18.6	16.4	12.9	10.8	5.73
1.80V/cell	150.8	123.5	108.3	88.5	69.0	54.6	40.6	33.6	26.6	21.4	18.0	15.8	12.7	10.5	5.5
1.85V/cell	123.2	102.5	91.3	76.3	60.9	49.4	36.8	30.5	24.2	19.7	17.1	15.0	12.1	10.3	5.32

Constant Power

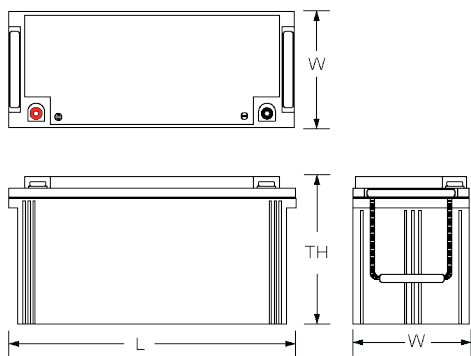
VoltageOverTime	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.60V/cell	362.8	286.4	246.8	191.7	147.3	124.7	90.6	73.6	56.2	44.4	38.3	33.0	26.0	21.7	11.8
1.65V/cell	335.1	267.7	232.8	184.5	142.8	122.6	89.4	72.9	55.6	44.2	38.0	32.9	25.9	21.64	11.72
1.67V/cell	333.9	266.9	231.8	183.6	141.8	122.0	89.2	72.8	55.4	44.1	37.9	32.8	25.8	21.6	11.7
1.70V/cell	321.1	258.9	225.6	179.6	139.8	120.6	88.1	71.9	55.1	43.5	37.2	32.5	25.7	21.5	11.6
1.75V/cell	299.3	244.4	214.5	173.5	135.9	117.3	85.6	69.7	53.8	43.0	36.4	32.1	25.3	21.3	11.4
1.80V/cell	275.6	228.9	202.8	167.5	131.9	105.4	78.7	65.3	51.9	41.9	35.4	31.1	25.0	20.7	10.9
1.85V/cell	229.2	192.7	173.0	145.6	117.2	95.9	71.7	59.6	47.5	38.7	33.7	29.5	24.0	20.4	10.6



Charging

Cycle Applications: Apply constant voltage charge at 2.35VPC – 2.45VPC (14.1 to 14.7 volts for 12V Monobloc) at 20°C. The initial charging current should be set at less than C/5 Amps. Switch to float charge when the current falls to a 3% capacity rate to avoid overcharging. Stand-By or "Float" Service: Apply constant voltage charge of 2.25VPC – 2.30VPC (13.5 to 13.8 volts for 12V Monobloc) at 20°C. When held at this voltage, the battery will seek its own current level and maintain itself in a fully charged condition. Temperature Compensation: Charging voltage for both cyclic and stand-by applications should be regulated in relation to ambient temperature. As temperature rises, charging voltage should be reduced to prevent overcharge and increased as the temperature falls to avoid undercharge. For further charging information, including temperature compensation factors, see the Power-Sonic Technical Manual.

Engineering Drawing



For Further Information

Please refer to our website, www.power-sonic.com, for a complete range of useful downloads, such as product catalogs, material safety data sheets (MSDS), ISO certification, etc.

Approvals



ISO 9001:2015 certification ensures consistent quality management and manufacturing standards for energy storage products.



California Proposition 65 compliant, providing consumer safety through reduced chemical exposure in battery manufacturing.



Sealed lead-acid batteries classified UN2800 non-spillable, certified safe for air, sea, and ground transport worldwide.



UL Recognized mark certifies safety-tested components for electrical reliability in battery and energy storage systems.