PSS-2V900

2V High Capacity
PSS-2V Series - Long Life Standby

High-capacity 2V VRLA cells designed for long design life in critical power and energy storage applications. Specifically designed for strong resilience to high temperatures with greater reliability. Designed for large-scale installations, they ensure secure, uninterrupted power when consistency is critical.

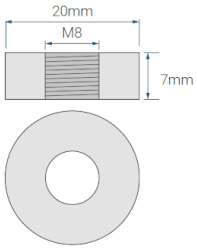
Performance Specs

Nominal Voltage	2.0 Volts, (1.0 cells)
Nominal Capacity	
20-hr. (42.4A to 1.8 Volts)	848.0Ah
10-hr. (80.0A to 1.8 Volts)	800.0Ah
5-hr. (143.2A to 1.7 Volts)	716.0Ah
1-hr. (490.8A to 1.6 Volts)	490.8Ah
Approximate Weight	111.11lbs, (50.4kg)
Dimensions +/- 0.08 in. (+/- 2mm) for length, width, and height dimensions	**L:** 16.14in, 410.0mm **W:** 6.89in, 175.0mm **H:** 12.99in, 330.0mm **TH:** 13.78in, 350.0mm
Internal Resistance (approx.) mΩ	0.4mΩ
Max Short Circuit Discharge Current	8800.0A
Operating Temperature Range	
Charge	5°F (-15°C) to 104°F (40°C)
Discharge	-4°F (-20°C) to 122°F (50°C)
Case	ABS Plastic Rated to UL94:HB
Recommended Power-Sonic Charger	

Configuration Options

Available Terminals (mm)

T11 THREADED INSERT – 8mm STUD



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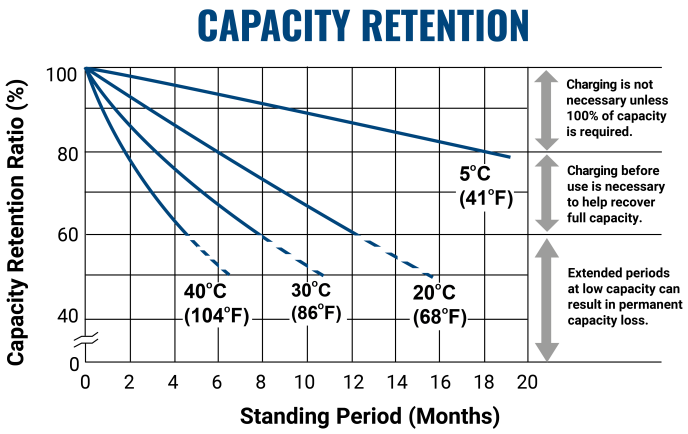
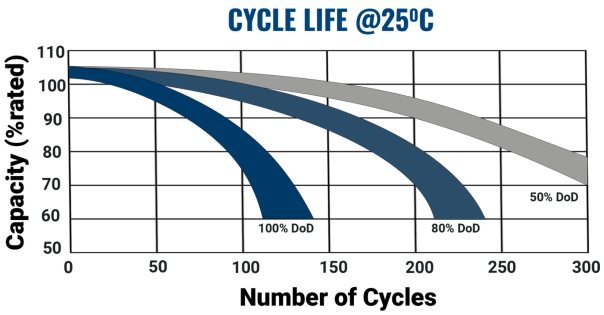
Graphs

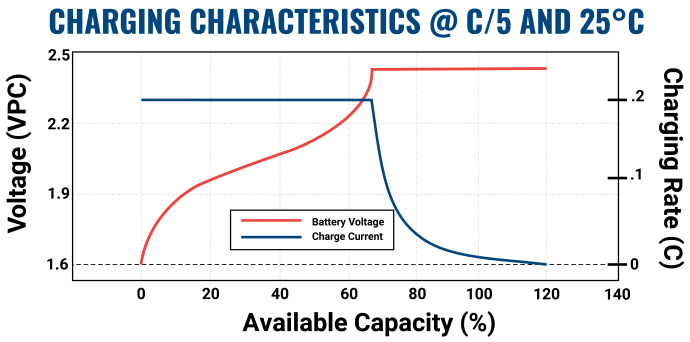
Capacity Retention SLA



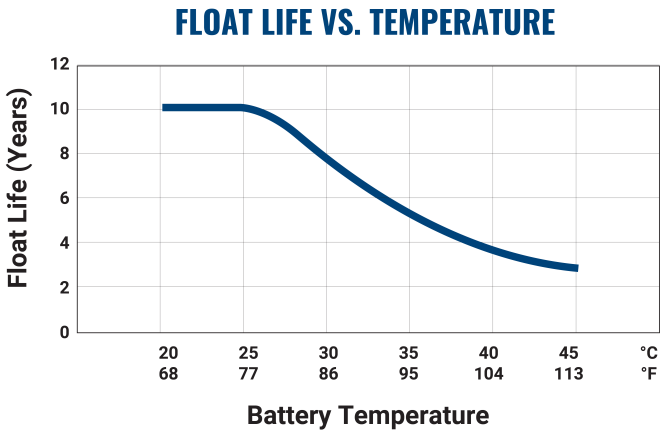
PS Cycle Life



SLA Charging



SLA Float Life 10YR



Constant Current

VoltageOverTime	15min	20min	30min	45min	1h	1.5h	2h	3h	4h
1.60V/cell	994.7	840.2	674.9	571.7	490.8	377.8	301.6	225.3	178.7
1.65V/cell	953.6289999999999	811.9	667.2382	547.5	471.27599999999995	364.1312	291.6272	218.8211	174.21099999999998
1.67V/cell	947.0	806.3	662.6	543.7	468.0	361.6	289.6	217.3	173.0
1.70V/cell	914.9	779.3	644.7	531.7	458.4	355.2	284.8	214.1	170.6
1.75V/cell	822.1	696.2	605.6	512.3	442.2	343.6	276.0	208.0	166.4
1.80V/cell	745.4	660.4	578.8	492.3	426.4	332.4	267.8	202.6	162.3
1.85V/cell	600.5	542.9	504.0	440.2	385.3	303.8	246.1	187.2	150.6

Constant Power

VoltageOverTime	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.60V/cell	1729.6	1475.1	1184.6	1066.6	921.1	714.9	574.0	432.3	344.8	289.6	249.7	201.2	166.8	88.3
1.65V/cell	1676.4	1438.5	1173.2	1025.1	886.7	690.0	555.1	419.4	335.4	282.2	243.9	197.1	163.8	86.8
1.67V/cell	1676.4	1438.5	1173.2	1025.1	886.7	690.0	555.1	419.4	335.4	282.2	243.9	197.1	163.8	86.8
1.70V/cell	1630.3	1399.2	1152.9	1007.6	872.8	680.4	547.9	414.3	331.6	279.3	241.4	195.4	162.5	86.2
1.75V/cell	1481.9	1262.7	1093.1	978.5	847.7	662.1	533.7	404.4	324.6	273.9	236.9	192.4	160.3	85.2
1.80V/cell	1358.0	1209.6	1053.8	947.5	823.3	644.5	520.7	395.6	317.9	268.7	232.7	189.3	158.1	84.2
1.85V/cell	1105.7	1004.1	925.5	853.6	749.0	592.4	481.0	367.1	296.0	250.2	217.5	177.2	148.4	79.9

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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

IEC 60896 standard ensures stationary lead-acid batteries meet safety, performance, and float charge application requirements.

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

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.

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