

### **PS-1230**

## Rechargeable Sealed Lead Acid Battery PS - General Purpose Series

Versatile sealed lead acid batteries specifically engineered for use in general purpose float and light cyclic applications including fire and security systems, emergency lighting, UPS, toys and medical devices.

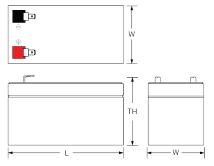


#### **Available Terminals**





#### **Engineering Drawing**



L: 5.28in (134.0mm)

W: 2.64in (67.0mm)

**H:** 2.36in (60.0mm) **HT:** 2.6in (66.0mm)

+/- 0.08 in. (+/- 2mm) for length, width, and height dimensions

#### **Features**

- AGM Technology
- Gas Recombination
- Power Volume Ratio
- SLA ABS Case
- SLA Maintenance Free

#### **Performance Specs**

Nominal Voltage	12.0V
<b>Nominal Capacity</b>	3.4Ah
20-hr Rate	3.4Ah
10-hr Rate	3.2Ah
5-hr Rate	3.06Ah
1-hr Rate	2.15Ah
Weight	1.35kg
Internal Resistance	45.0 milliohms
Max Discharge Current	32.0A
Charge Temp Range	?4°F (?20°C) to 104°F (40°C)
Discharge Temp Range	5°F (?15°C) to 122°F (50°C)
Case Material	ABS (UL94 HB or V-0 optional)



#### **Available options**

- PS-1230 FR F1 VDS
- PS-1230 FR F1

#### **Applications**

Utility



Wind

#### **Constant Current Discharge Table**

VoltageOverTime	5min	10min	15min	20min	30min	45min	1h	1.5h	<b>2</b> h	3h	4h	5h	6h	8h	10h	<b>20</b> h
1.60V/cell	13.8	9.04	6.8	5.38	3.88	2.76	2.15	1.58	1.25	0.91	0.729	0.626	0.534	0.419	0.34	0.178
1.65V/cell	13.2	8.85	6.64	5.28	3.82	2.73	2.13	1.56	1.24	0.897	0.724	0.622	0.53		0.338	0.175
1.67V/cell	13.0	8.67	6.57	5.23	3.78	2.69	2.1	1.55	1.23	0.894	0.717	0.616	0.527	0.413	0.332	0.174
1.70V/cell	12.5	8.44	6.41	5.12	3.72	2.65	2.07	1.53	1.21	0.885	0.71	0.611	0.522	0.41	0.33	0.172
1.75V/cell	12.0	8.11	6.21	4.98	3.62	2.59	2.03	1.5	1.2	0.872	0.7	0.602	0.516	0.406	0.32	0.17
1.80V/cell	11.4	7.8	6.01	4.84	3.53	2.54	1.99	1.48	1.18	0.859	0.691	0.595	0.51	0.401	0.314	0.167
1.85V/cell	10.6	7.36	5.72	4.66	3.43	2.47	1.94	1.45	1.15	0.845	0.681	0.586	0.502	0.396	0.31	0.165

#### **Constant Power Discharge Table**

VoltageOverTime	5min	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	<b>20</b> h
1.60V/cell	24.6	16.5	12.7	10.1	7.36	5.24	4.11	3.04	2.42	1.77	1.42	1.23	1.06	0.827	0.675	0.359
1.65V/cell	24.1	16.2	12.4	9.91	7.26	5.18	4.06	3.01	2.39	1.76	1.41	1.22	1.05	0.818	0.671	0.357
1.67V/cell	23.6	16.1	12.3	9.88	7.2	5.15	4.04	2.99	2.38	1.74	1.4	1.21	1.04	0.816	0.668	0.356
1.70V/cell	23.0	15.7	12.1	9.7	7.09	5.08	3.99	2.96	2.36	1.73	1.39	1.2	1.03	0.81	0.663	0.353
1.75V/cell	22.2	15.2	11.7	9.48	6.94	4.99	3.93	2.92	2.33	1.71	1.38	1.19	1.02	0.803	0.657	0.35
1.80V/cell	21.3	14.7	11.4	9.28	6.8	4.9	3.86	2.87	2.29	1.68	1.36	1.17	1.01	0.795	0.651	0.346
1.85V/cell	20.0	14.0	11.0	8.97	6.62	4.79	3.78	2.82	2.26	1.66	1.34	1.16	0.99	0.784	0.643	0.342

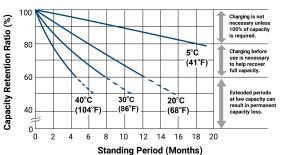




#### **Graphs**

#### 1. Capacity Retention SLA

#### **CAPACITY RETENTION**

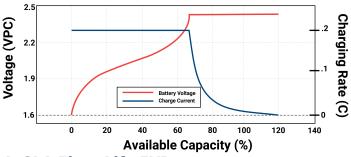


#### 2. PS Cycle Life

# CYCLE LIFE @25°C 110 100 100 100 100 100 150 200 250 300 Number of Cycles

#### 3. SLA Charging

#### CHARGING CHARACTERISTICS @ C/5 AND 25°C



#### 4. SLA Float Life 5YR

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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? oat 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.

#### **Approvals**









