

### **PS-1240**

## 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:** 3.54in (90.0mm) **W:** 2.76in (70.0mm) **H:** 3.98in (101.0mm)

**HT:** 4.21in (107.0mm)

+/- 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>	4.0Ah
20-hr Rate	4.0Ah
10-hr Rate	3.72Ah
5-hr Rate	3.44Ah
1-hr Rate	2.33Ah
Weight	1.26kg
Internal Resistance	63.0 milliohms
Max Discharge Current	60.0A
<b>Charge Temp Range</b>	?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-1240 F1

#### **Applications**







Fire Security



General Purpose



Medical



Telecomm



m UPS



Utility



Solar

#### **Constant Current 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	13.8	8.91	6.7	5.38	3.88	2.88	2.33	1.76	1.47	1.05	0.833	0.706	0.603	0.472	0.385	0.206
1.65V/cell	12.7	8.48	6.47	5.23	3.81	2.83	2.3	1.74	1.45	1.04	0.823	0.698	0.597	0.467	0.381	0.204
1.67V/cell	12.6	8.4	6.41	5.18	3.77	2.81	2.28	1.73	1.44	1.03	0.817	0.694	0.593	0.465	0.379	0.203
1.70V/cell	12.1	8.18	6.27	5.09	3.72	2.77	2.26	1.71	1.43	1.02	0.811	0.688	0.589	0.461	0.376	0.202
1.75V/cell	11.3	7.81	6.06	4.94	3.64	2.72	2.22	1.68	1.4	1.01	0.799	0.679	0.581	0.456	0.372	0.2
1.80V/cell	10.5	7.45	5.85	4.8	3.55	2.67	2.18	1.65	1.38	0.99	0.789	0.671	0.574	0.45	0.367	0.198
1.85V/cell	9.6	7.09	5.63	4.66	3.46	2.62	2.14	1.63	1.36	0.978	0.778	0.662	0.566	0.445	0.363	0.195

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

VoltageOverTime	5min	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.60V/cell	25.3	16.6	12.5	10.1	7.35	5.48	4.46	3.39	2.84	2.04	1.63	1.38	1.18	0.933	0.762	0.411
1.65V/cell	23.7	15.9	12.2	9.9	7.24	5.42	4.41	3.35	2.81	2.02	1.61	1.37	1.17	0.92	0.754	0.408
1.67V/cell	23.5	15.8	12.1	9.8	7.17	5.37	4.38	3.33	2.79	2.01	1.6	1.36	1.17	0.919	0.751	0.406
1.70V/cell	22.6	15.4	11.9	9.7	7.09	5.32	4.34	3.31	2.77	2.0	1.59	1.35	1.16	0.912	0.746	0.403
1.75V/cell	21.2	14.8	11.5	9.4	6.97	5.24	4.28	3.26	2.73	1.97	1.57	1.34	1.15	0.902	0.738	0.399
1.80V/cell	19.7	14.2	11.2	9.2	6.83	5.16	4.22	3.22	2.7	1.95	1.55	1.32	1.13	0.892	0.73	0.395
1.85V/cell	18.3	13.6	10.8	8.96	6.7	5.07	4.16	3.18	2.66	1.92	1.53	1.31	1.12	0.882	0.721	0.391

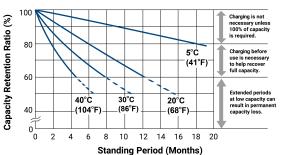




#### **Graphs**

#### 1. Capacity Retention SLA

#### **CAPACITY RETENTION**

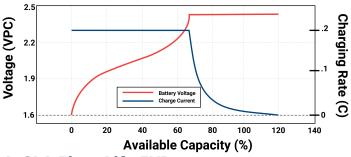


#### 2. PS Cycle Life

# 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**









