

12V 55Ah Top Terminal AGM VRLA Battery

Product characteristics:

- Valve-regulated lead-acid battery
- UPS and reserve power applications
- EUROBAT design life definition: Long Life 10 - 12 years
- Extremely long float life performance
- Superior cycling endurance
- Compact design with high energy density
- Low installation cost, maintenance free product
- Sealed for leak-proof operation
- Delivered ready for use
- Non-hazardous cargo for ground, sea and air transport
- Fully recyclable product



Technical specifications:

Electrical specifications:

- Nominal voltage: 12V
- Number of cells: 6
- Rated capacity: 55 Ah (10 h rate to 1.80 Vpc at 25 °C)

- Internal resistance: 8.1 mOhm (IEC 60 896 -21/22)
- Short circuit current: 1 572 A (IEC 60 896 -21/22)
- Float charge voltage: 2.27 V per cell (Vpc) at 25 °C

Design features:

- Design life at 20 °C: Long Life 10 - 12 years
- Plates: Tick Flat Pasted
- Active material: Very high purity virgin lead
- Grid alloy: Lead-Calcium-Tin alloy
- Electrolyte: Sulphuric acid, Analytical grade
- Separator: Absorbing Glass Mat (AGM)
- Operating temperature: - 10 °C to +50 °C (maximum)
+15 °C to +25 °C (recommended)
- Venting valve: Rubber, one way, self resealing
- Opening pressure: 1.7 PSI
- Resealing pressure: 1.5 PSI
- Internal gas recombination efficiency: 99%
- Flame arrestor: Available
- Storage temperatures: -20 °C to +50 °C
- Self discharge: Less than 2.5% per month at 20°C
- Storability without recharging: Up to 6 months at 20°C
- Shelf life: Up to 1 year
- Container / lid material: Shock resistant ABS FR;
flammability class UL94 V0
- Terminal position: Top
- Terminal sealing: Mechanical + epoxy double sealing
- Terminal type: Brass; Female; M6 thread
- Terminal torque: 6 Nm
- Carrying Handles: Available

Applicable standards:

- IEC 60896 - 21/22 • IEC 61427 - 1/2 • IEEE 1184
- EN 50272 - 2 • IEC 61056 - 1 • IEEE 1187 / 1188

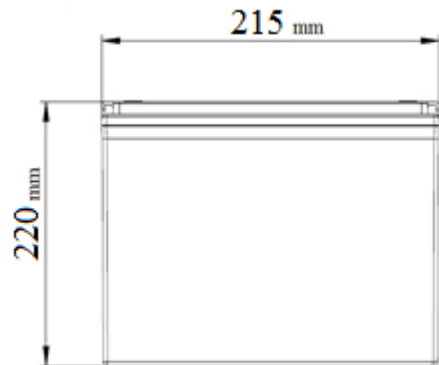
Manufacture standards:

- ISO 9001, ISO 14001, OHSAS 18001, AQAP 2110

Physical characteristics:

	SI Units	US Units
Length	215 mm	8.5 inches
Width	173 mm	6.8 inches
Height	220 mm	8.7 inches
Weight	22 kg	48.5 lbs

Drawings:



Performance characteristics:

BATTERY DISCHARGE PERFORMANCE AT 25 °C													
Discharge performance at constant current discharge (A) for battery 12UPM1800 at 25 °C													
Uf, Vpc	5 min	10 min	15 min	30 min	45 min	1 h	2 h	3 h	4 h	5 h	6 h	8 h	10 h
1.60	209	153	114	70	46	39.2	21.5	15.5	12.1	10.1	8.7	6.60	5.67
1.65	193	147	113	69	45	38.3	21.3	15.3	12.1	10.0	8.6	6.59	5.64
1.70	179	138	111	66	44	38.0	21.1	15.2	12.0	10.0	8.5	6.58	5.61
1.75	169	130	105	65	44	37.9	20.8	15.1	11.8	9.9	8.5	6.51	5.56
1.80	156	121	96	63	43	36.1	20.5	15.0	11.7	9.8	8.4	6.50	5.50
1.85	138	111	86	59	40	34.6	19.5	13.6	11.1	9.4	8.2	6.33	5.36

Discharge performance at constant power discharge (W per block) for battery 12UPM1800 at 25 °C													
Uf, Vpc	5 min	10 min	15 min	30 min	45 min	1 h	2 h	3 h	4 h	5 h	6 h	8 h	10 h
1.60	2438	1841	1401	886	585	506.7	279.1	202.0	159.2	132.7	114.2	87.07	72.80
1.65	2272	1791	1390	875	580	496.0	276.9	200.5	158.4	132.0	113.5	87.07	72.80
1.70	2133	1701	1363	838	567	492.5	275.5	199.8	157.7	131.3	112.8	87.07	72.80
1.75	2036	1615	1303	830	565	491.7	272.6	198.4	156.3	130.6	112.1	86.36	72.08
1.80	1904	1502	1202	811	558	469.6	269.1	197.7	154.9	129.9	111.3	86.36	71.37
1.85	1698	1382	1089	770	522	451.1	256.2	179.1	147.0	124.9	108.5	84.22	69.23

Discharge performance at constant power discharge (W per cell) for battery 12UPM1800 at 25 °C													
Uf, Vpc	5 min	10 min	15 min	30 min	45 min	1 h	2 h	3 h	4 h	5 h	6 h	8 h	10 h
1.60	406	306	233	147	97	84.3	46.4	33.6	26.5	22.1	19.0	14.49	12.11
1.65	378	298	231	146	97	82.5	46.1	33.4	26.4	22.0	18.9	14.49	12.11
1.70	355	283	227	139	94	81.9	45.8	33.3	26.2	21.9	18.8	14.49	12.11
1.75	339	269	217	138	94	81.8	45.4	33.0	26.0	21.7	18.6	14.37	11.99
1.80	317	250	200	135	93	78.1	44.8	32.9	25.8	21.6	18.5	14.37	11.88
1.85	283	230	181	128	87	75.1	42.6	29.8	24.5	20.8	18.1	14.01	11.52

Temperature correction factor of capacity at constant current discharge										
Discharge time	-10 °C	0 °C	10 °C	15 °C	20 °C	25 °C	30 °C	35 °C	40 °C	50 °C
From 5 to 59 minutes	0.70	0.80	0.90	0.95	0.97	1	1.05	1.10	1.13	1.15
From 1 to 20 hours	0.82	0.88	0.94	0.97	0.98	1	1.03	1.05	1.07	1.08

Battery charge conditions at 25 °C			
Charge current limit	Float charge voltage	Equalization charge voltage	Boost charge voltage
0.1 – 0.25C ₁₀ A Recommended: 0.25C ₁₀ A	2.27 V per cell at 25 °C; Temperature correction: -3 mV / cell / °C	2.32 V per cell at 25 °C Recommended: every 3 months for 24h during long time float operation	2.40 V per cell at 25 °C Temperature correction: -4 mV / cell / °C

