



HR Series

HR 1221W Datasheet

12V Top Terminal VRLA-AGM

Specifications

| | |
|--|--|
| Voltage (Vdc) | 12 |
| Nominal Capacity (1.67 VPC @25°C) | 21W @15min-rate |
| Watts Per Cell (30-Sec 1.67 VPC @ 25°C) | -- |
| Watts Per Cell (5-Min 1.67 VPC @ 25°) | 52.5 |
| Watts Per Cell (15-Min 1.67 VPC @ 25°) | 25.0 |
| Max Charge Current (A) | 2.10 |
| Max Discharge Current (A) | 90 * |
| Short Circuit Current (A) | 249 |
| Internal Resistance (mΩ) | Approx. 23.0 |
| Terminal Type | F2-Faston Tab250 * |
| Terminal Torque | -- |
| Container Material | ABS (UL 94-HB) & Flame Retardant (94-V0) available upon request |
| Weight (kg. / lb., Approx.) | 1.80 / 3.97 |
| Length (L) (mm / in) | 90.0±1.0 / 3.54±0.04 |
| Width (W) (mm / in) | 70.0±1.0 / 2.76±0.04 |
| Height (H) (mm / in) | 106.1±1.5 / 4.18±0.06 |
| Design Life | Up to 5 Years in Standby Service at 25°C Eurobat (20°C): 3-5 Years Standard Commercial |
| Operating Temperature | Nominal: 25°C (77°F) Discharge: -15°C - 50°C (5°F-122°F) Charge/Storage: -15°C - 40°C (5°F - 104°F) |
| Float Charging Voltage | 13.5 - 13.8 Vdc/battery 25°C (77°F) |
| Eq. Charging Voltage | 14.4 - 15.0 Vdc/battery 25°C (77°F) |
| Self-Discharge | Less than 10% after 90 days, can be stored up to 6 months at 25°C (77°F); Fully recharging is required before usage, and charged sooner if stored at higher temperature than 25°C (77°F). |



Valve Regulated Lead Acid
(VRLA) Battery

Maintenance-Free, Absorbent
Glass Mat (AGM) Technology for
Efficient Gas Recombination of
up to 99%

Pure Lead Construction and
Proprietary Elements

Designed for High-Rate UPS,
Float Service Standby Power
Applications

Built in Accordance with IEC
61056-1/2:2012 and UL1989
Recognized (MH14533)





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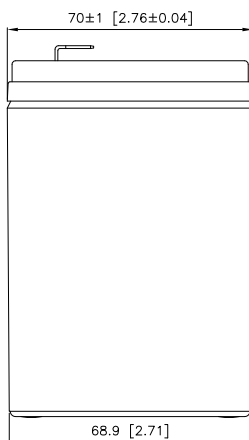
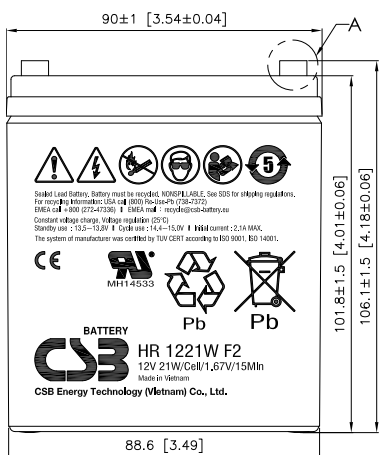
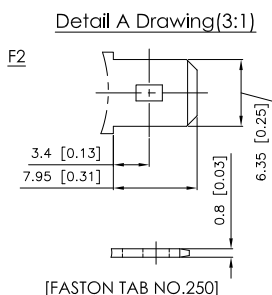
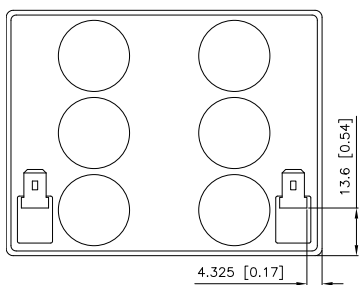
12V Top Terminal VRLA-AGM

Constant Current Discharge Characteristics Unit: A (25°C, 77°F)

| F.V/Time | 2MIN | 4MIN | 5MIN | 6MIN | 8MIN | 10MIN | 15MIN | 20MIN | 30MIN | 45MIN | 60MIN | 90MIN |
|-------------------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|
| 10.02V (1.67 VPC) | 43.1 | 29.7 | 26.2 | 23.6 | 19.9 | 17.1 | 12.5 | 10.1 | 7.18 | 5.10 | 4.00 | 2.71 |
| 10.50V (1.75 VPC) | 37.4 | 27.4 | 24.4 | 22.2 | 19.0 | 16.3 | 12.1 | 9.70 | 7.07 | 5.05 | 3.98 | 2.56 |
| 10.80V (1.80 VPC) | 33.1 | 25.2 | 22.8 | 21.0 | 18.2 | 15.7 | 11.8 | 9.51 | 7.00 | 5.02 | 3.96 | 2.46 |

Constant Power Discharge Characteristics Unit: W (25°C, 77°F)

| F.V/Time | 2MIN | 4MIN | 5MIN | 6MIN | 8MIN | 10MIN | 15MIN | 20MIN | 30MIN | 45MIN | 60MIN | 90MIN |
|-------------------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|
| 10.02V (1.67 VPC) | 515 | 357 | 315 | 284 | 238 | 203 | 150 | 120 | 86.6 | 61.4 | 48.1 | 32.5 |
| 10.50V (1.75 VPC) | 451 | 329 | 293 | 266 | 226 | 194 | 145 | 116 | 85.8 | 61.0 | 47.9 | 30.7 |
| 10.80V (1.80 VPC) | 397 | 302 | 272 | 250 | 216 | 188 | 141 | 113 | 85.4 | 60.8 | 47.8 | 29.5 |



* F1 terminal is available, Max Discharge Current = 60 A