



# 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 Nominal: 25°C (77°F) Discharge: -15°C - 50°C (5°F-122°F) Charge/Storage: -15°C - 40°C (5°F - 104°F)
Operating Temperature	
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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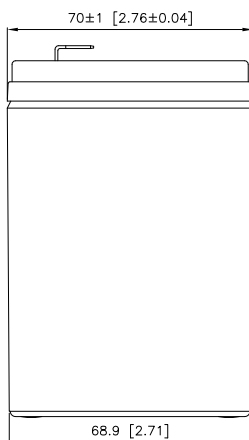
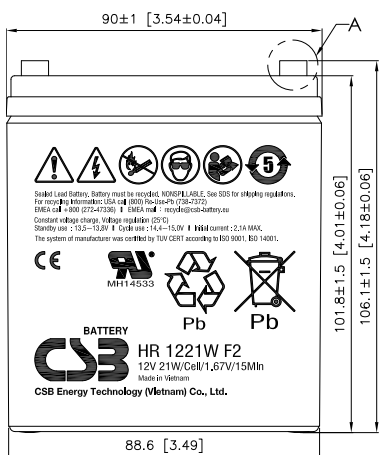
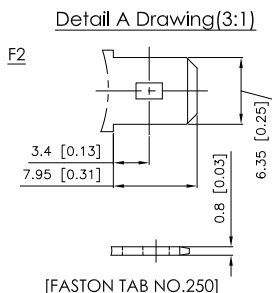
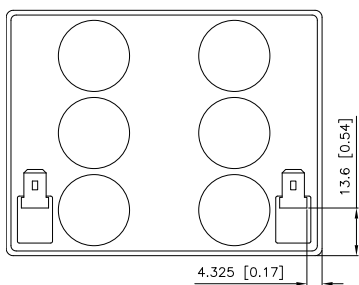
12V Top Terminal VRLA-AGM

### 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