

General Application

12VHR400W is custom designed specifically for the UPS applications . It offers much improved power density of Up to 30% more watts per kilogram than our conventional VC Series.

Specification

- NOMINAL VOLTAGE : 12 V
- NOMINAL CAPACITY(20 hr):400W/Cell @15 Minutes rate to 1.67V@25°C(77 °F)
- **DIMENSIONS**
- TOTAL HEIGHT(RT TERMINAL) :221 mm (8.70 inches)**
- TOTAL HEIGHT(FP TERMINAL) :238 mm (9.37 inches)**
- CONTAINER HEIGHT :217 mm (8.43 inches)**
- LENGTH :329 mm (12.95 inches)**
- WIDTH :172 mm (6.77 inches)**
- WEIGHT : APPROX32.8Kg(72.31lbs)
- CONTAINER MATERIAL : UL94HB ABS
- INTERNAL RESISTANCE(25°C , 77°F) : ~6.5mΩ
- ISCHARGE CAPACITY UNDER DIFFERENT TEMPERATURES
- 40°C : ~102%
- 25°C : ~100%
- 0 °C : ~85%

Characteristics

- **CHARGING VOLTAGE (25°C , 77 °F)**
- STANDBY USE : 13.65V± 0.15 V**
- CYCLE USE : 14.7V±0.3 V**
- **MAX DISCHARGE CURRENT : 600 A (5 sec)**
- **MAX CHARGING CURRENT : 30 A**
- **SELF-DISCHARGE RESIDUAL CAPACITY(25°C , 77 °F)**
- AFTER 3 MONTHS : ~90%**
- AFTER 6 MONTHS : ~82%**
- AFTER 12 MONTHS : ~70%**

Ordering Guide

(TO ORDER: ASSEMBLE YOUR ITEM NUMBER PER TABLE BELOW)

Series	Watts/cell	Options	Terminal Type
12VHR	400W	FR(Flame Retardant)	RT-02 or RT-03 or FP-06
		-(Non Flame Retardant)	RT-02 or RT-03 or FP-06

Features and Benefits:

10 Year Design Life

Flame Retardant Poly Propylene Case and Cover
> Impact resistant, self-extinguishing material with standard Underwriters Laboratories(UL) 94V rating

Tank Formed Plate Construction

>100% capacity on shipment
>Plate consistency and matching dependable performance

Copper Threaded Insert Post

> High conductivity
> Retains required torque values and allows for easy installation

Epoxy Post Seal

>Elimination of acid egress for trouble-free service life

Ceramic Disc Flame Arrestor

>Prevent any errant spark or flames from entering the battery

Transportation

>Non-hazardous for air / sea / rail / road transportation

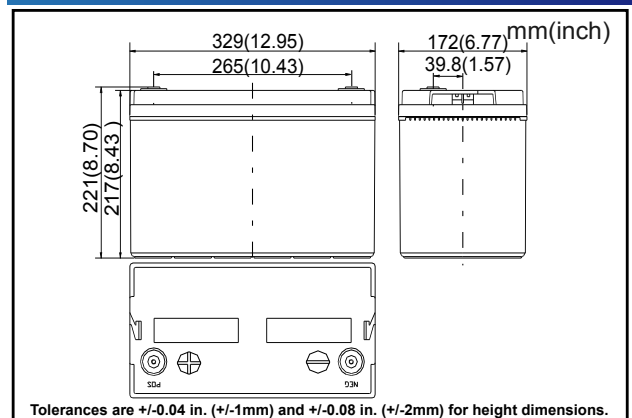
Applicable Standards

>UL Recognized
>UL 1778 4th edition - UPS equipment certification
>IEC 60896 Part 21 - VRLA methods of testing
>IEC 60896 Part 22 - VRLA requirements
>BS 6290 Part 4 - Specifications for VRLA classification

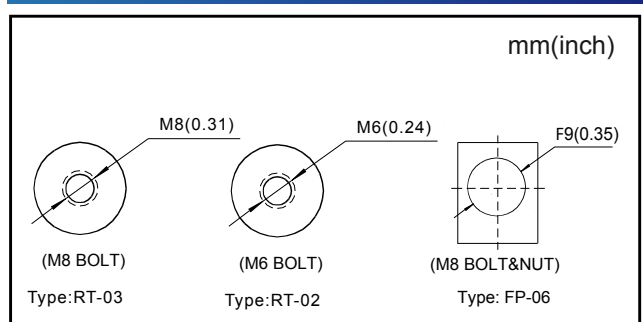
Intepower Manufacturing

>ISO 9001 Quality Management System
>ISO 14001 Environmental Management System
>OHSAS 18001 Workplace Safety & Health

Dimensions



Terminal



Constant Power Discharge Ratings - Watts Per Cell @77°F(25°C)

Operating Time to End Point Voltage (in minutes)

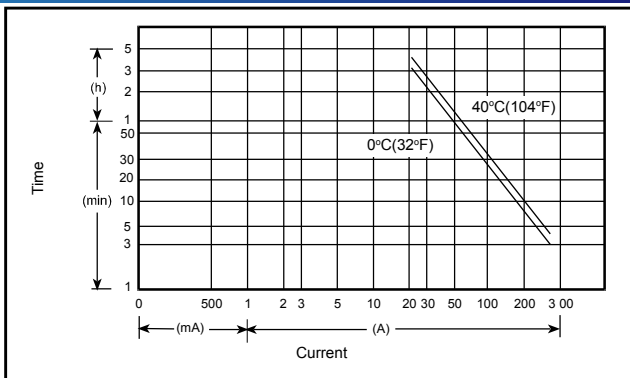
End Point Volts/Cell	5	10	15	20	30	40	45	50	60	90
1.75	616	461	377	312	230	184	168	154	133	96
1.70	680	490	390	319	234	187	170	156	135	97
1.67	720	505	400	325	237	189	172	158	136	98
1.65	740	515	406	329	239	191	174	160	137	99
1.60	770	525	412	333	241	193	175	161	138	100

Constant Current Discharge Ratings - Amperes @77°F(25°C)

Operating Time to End Point Voltage (in hours)

End Point Volts/Cell	1	2	3	5	8	10	12	20	24	72
1.85	56.0	33.0	23.9	15.8	10.80	8.90	7.58	4.77	4.00	1.38
1.80	62.0	35.3	25.3	16.6	11.40	9.44	8.02	4.99	4.18	1.43
1.75	68.0	38.0	27.0	17.6	11.90	9.80	8.30	5.10	4.27	1.46

Discharge Current vs Time



Discharge Characteristics @25 °C (77 °F)

