

General Application

12VHR300W 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): 300W/Cell @15 Minutes rate to 1.67V@25°C(77 °F)
- **DIMENSIONS**
 - TOTAL HEIGHT (RT TERMINAL) :211 mm (8.31 inches)**
 - TOTAL HEIGHT(FP TERMINAL) :235 mm (9.25 inches)**
 - CONTAINER HEIGHT :208 mm (8.19 inches)**
 - LENGTH :260 mm (10.24 inches)**
 - WIDTH :169 mm (6.65 inches)**
- WEIGHT : APPROX 28 Kg (61.73 lbs)
- CONTAINER MATERIAL : UL94HB ABS
- INTERNAL RESISTANCE(25°C , 77°F) : ~6.5mΩ
- DISCHARGE 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 | : 24 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 | 300W | FR(Flame Retardant) | RT-02 or FP-03 |
| | | -(Non Flame Retardant) | RT-02 or FP-03 |

12VHR300W

12V300W

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

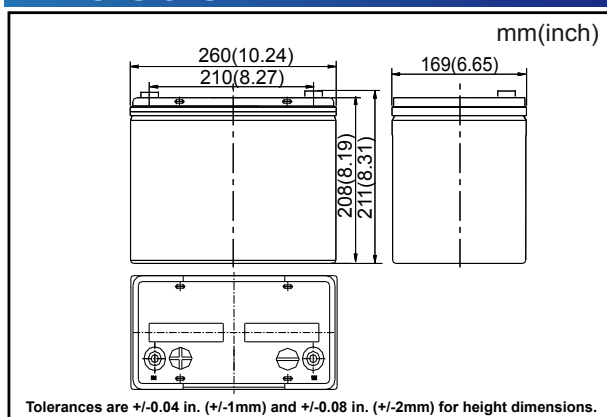
Ceramic Disc Flame Arrestor
>Prevent any errant spark or flames from entering the battery

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

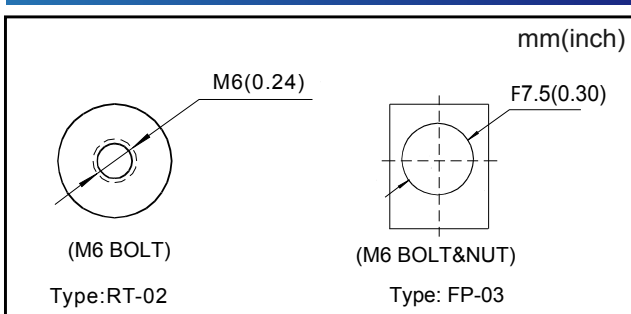
Applicable Standards
>UL Recognized
>UL 1778 4th edition - UPS equipment certification
>IEC 60896 Part 21 - VRLA methods of testing
>IEC 60896 Part 22 - VRLA requirements
>BS 6290 Part 4 - Specifications for VRLA classification

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)

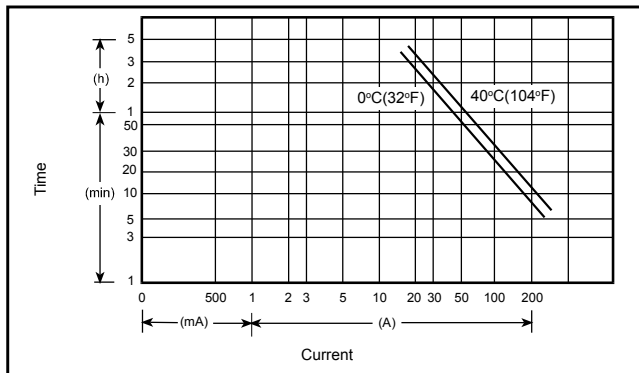
| End Point Volts/Cell | 5 | 10 | 15 | 20 | 30 | 40 | 45 | 50 | 60 | 90 |
|----------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|
| 1.75 | 496 | 360 | 282 | 234 | 174 | 140 | 128 | 118 | 103 | 74 |
| 1.70 | 530 | 373 | 294 | 240 | 177 | 142 | 130 | 120 | 104 | 75 |
| 1.67 | 550 | 382 | 300 | 244 | 179 | 144 | 131 | 121 | 105 | 76 |
| 1.65 | 566 | 387 | 303 | 246 | 181 | 146 | 133 | 122 | 106 | 77 |
| 1.60 | 580 | 391 | 306 | 248 | 183 | 147 | 134 | 123 | 107 | 78 |

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 | 48.4 | 27.1 | 19.6 | 12.6 | 8.34 | 6.85 | 5.80 | 3.60 | 3.03 | 1.05 |
| 1.80 | 50.7 | 28.3 | 20.3 | 13.1 | 8.81 | 7.27 | 6.15 | 3.80 | 3.18 | 1.08 |
| 1.75 | 52.5 | 29.0 | 20.6 | 13.4 | 9.13 | 7.50 | 6.35 | 3.89 | 3.25 | 1.10 |

Discharge Current vs Time



Discharge Characteristics @25 °C (77 °F)

