

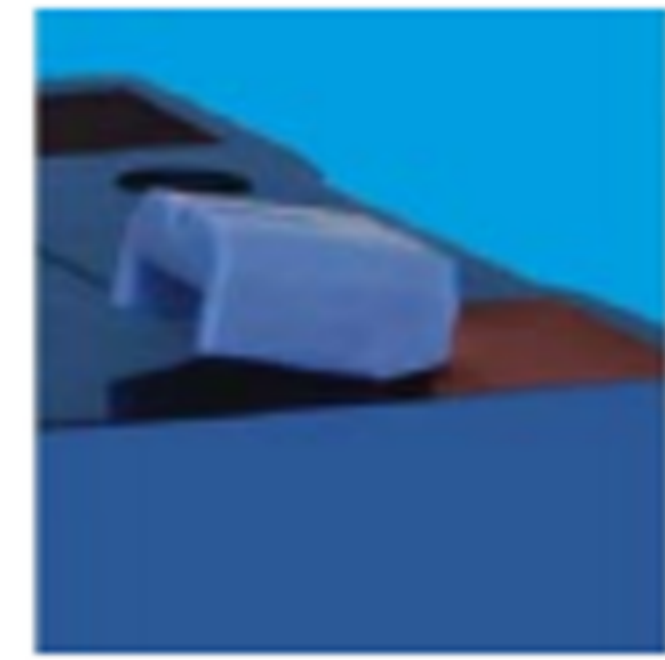


ORIGIN BATTERY
Power from the Start

OR-1290HR GENERAL CHARACTERISTICS

- Positive and negative plates in lead-calcium tin alloy
- Superior energy density
- Operates at a low internal pressure.
- Gas Recombination
- Usable in any orientation
- A recognized component of UL

- Very high power output
- Application specific designs
- A couple Range from 13W to 890W per cell for 10' @ 1.60Vpc
- Six months shelf life at 20C
- Design life 5 years



DIMENSIONS AND WEIGHT

| | SI Units | Imperial |
|-----------------------|----------|-----------|
| Length | 151mm | 5.94 inch |
| Width | 65mm | 2.56 inch |
| Height | 94mm | 3.70 inch |
| Total Height | 100mm | 3.94 inch |
| Approx. Weight | 2.80Kg | 6.17 lbs |

HIGH RATE DISCHARGE SERIES

The new ORIGIN High-Rate Discharge series batteries are specially designed for applications where need high power output. By optimum design of battery grids and plate paste formula, the HP/HF series can deliver up to 40% more power than VISION standard CP/FM series.

PERFORMANCE CHARACTERISTICS

- Nominal Voltage 12V
Number of cell 6
- Nominal Capacity 68 F(20 C)
10 min wattage @ 1.6V 50W/cell
- Nominal Capacity 77 F(25 C)
20 hour rate (0.45A, 10.5V) 9.00Ah
- Internal Resistance
Fully Charged battery 68 F(20 C) 18mOhms
- Self-Discharge
3% of capacity declined per month at 20 C(average)

- Operating Temperature Range
Discharge -20~60 C
Charge -10~60 C
Storage -20~60 C
- Max. Discharge Current: 68 F(20 C) 135A(5s)
- Short Circuit Current: 670A
- Charge Methods: Constant Voltage Charge: 68 F(20 C)
Cycle use: 2.30-2.35VPC
Maximum charging current 3.6A
Temperature compensation -30mV/ C
- Standby use: 2.23-2.27VPC
Temperature compensation -20mV/ C

UPC Code: 024606140298



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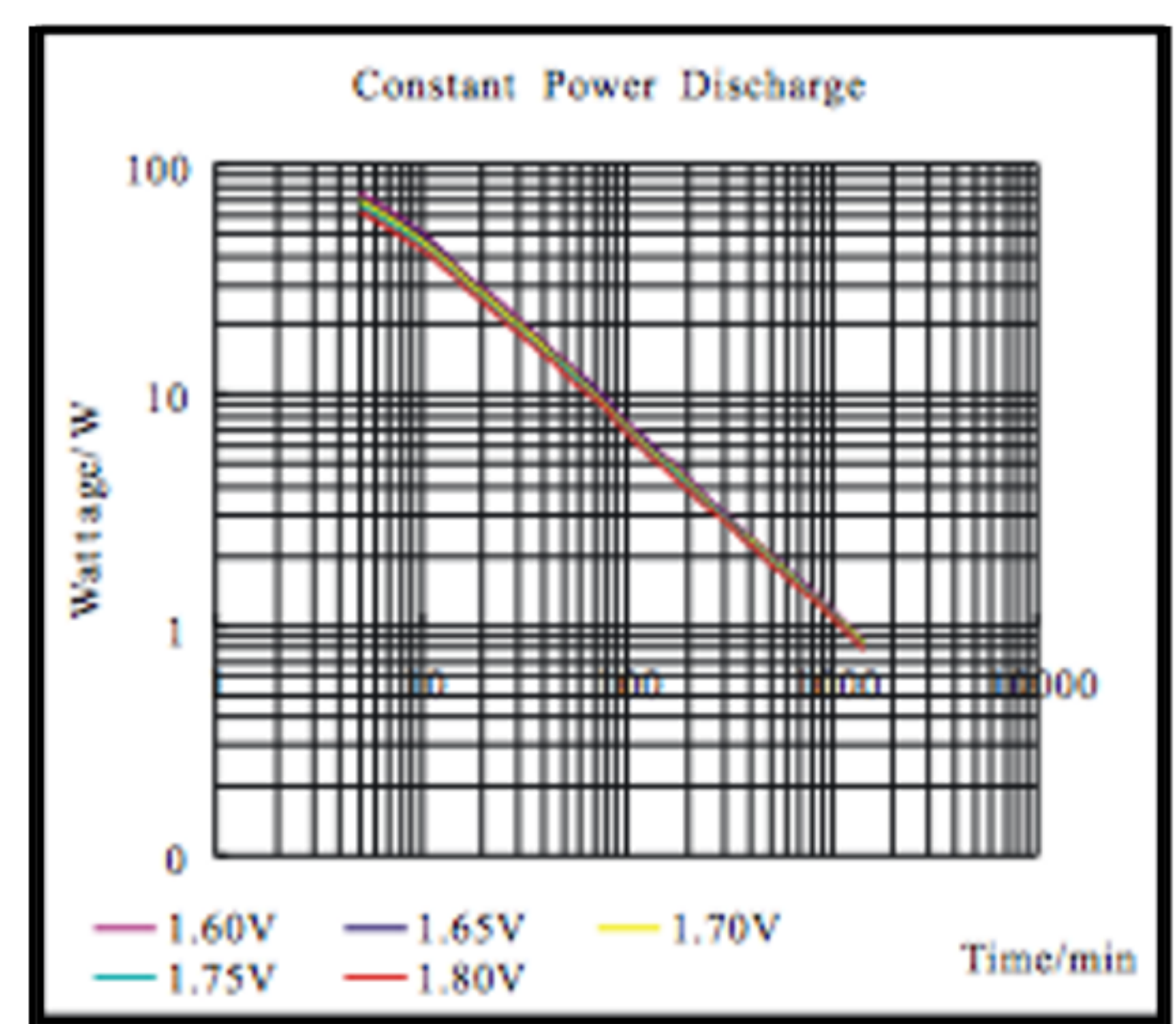
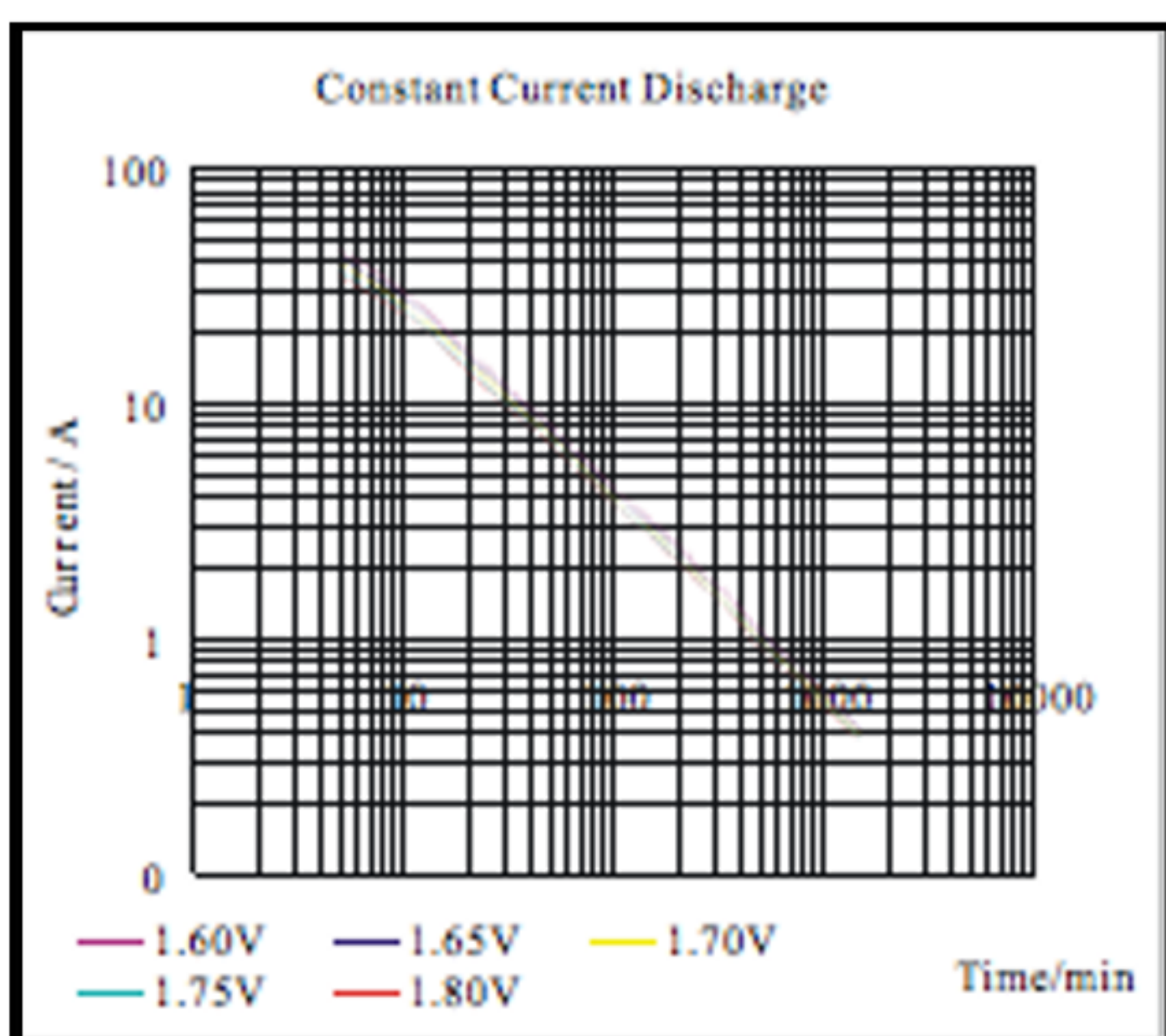
OR-1290HR BATTERY SPECIFICATIONS

Constant Current Discharge Data (Amperes at 20oC)

| End Point Volts/Cell | 5m | 10m | 15m | 20m | 25m | 30m | 35m | 40m | 45m | 50m | 55m | 1h |
|----------------------|------|------|------|------|------|------|------|------|-------|------|------|------|
| 1.60V | 43.8 | 29.3 | 21.6 | 16.8 | 13.9 | 12.0 | 10.6 | 9.56 | 8.76 | 7.98 | 7.35 | 6.82 |
| 1.65V | 41.2 | 27.7 | 20.4 | 15.9 | 13.2 | 11.3 | 10.1 | 9.09 | 8.33 | 7.60 | 7.00 | 6.50 |
| 1.70A | 38.6 | 26.1 | 19.3 | 15.0 | 12.5 | 10.7 | 9.52 | 8.61 | 7.91 | 7.22 | 6.66 | 6.19 |
| 1.75A | 36.0 | 24.5 | 18.2 | 14.2 | 11.7 | 10.1 | 8.99 | 8.14 | 7.48 | 6.84 | 6.31 | 5.88 |
| 1.80A | 34.5 | 23.6 | 17.6 | 13.7 | 11.4 | 9.85 | 8.76 | 7.94 | 0.344 | 6.68 | 6.17 | 5.75 |

Constant Power Discharge Data (Watts per cell at 20oC)

| End Point Volts/Cell | 5m | 10m | 15m | 20m | 25m | 30m | 35m | 40m | 45m | 50m | 55m | 1h |
|----------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1.60V | 75.3 | 50.0 | 37.0 | 29.2 | 24.6 | 21.5 | 18.9 | 16.9 | 15.4 | 14.2 | 13.2 | 12.3 |
| 1.65V | 72.1 | 48.1 | 35.7 | 28.2 | 23.8 | 20.8 | 18.3 | 16.4 | 15.0 | 13.8 | 12.8 | 12.0 |
| 1.70A | 68.9 | 46.3 | 34.4 | 27.3 | 23.0 | 20.1 | 17.7 | 15.9 | 14.5 | 13.3 | 12.4 | 11.6 |
| 1.75A | 65.7 | 44.4 | 33.1 | 26.3 | 22.1 | 19.4 | 17.1 | 15.4 | 14.1 | 12.9 | 12.0 | 11.3 |
| 1.80A | 62.5 | 42.5 | 31.8 | 25.3 | 21.3 | 18.7 | 16.5 | 14.9 | 13.6 | 12.5 | 11.6 | 10.9 |



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