12-1046





UPS12-400MRX

Valve Regulated Lead Acid Battery

Designed for UPS Standby Power Applications.



APPLICATIONS

- · Data Centers
- · Network Operations Centers
- · Industrial Process Control Facilities
- Internet Housing Sites
- · Semiconductor Manufacturing
- · Banks & Financial Markets
- · Power Generation Plants
- Hospitals & Testing Laboratories
- Emergency 911 Response Centers

FEATURES & BENEFITS

- 10 year design life @ 25°C
- Absorbent Glass Mat (AGM) technology for efficient gas recombination of up to 99% and freedom from electrolyte maintenance.
- 3 Year Warranty (refer Dynasty warranty card, 41-9027)
- Patented Long Life Alloy having the lowest calcium levels in the industry minimizing grid growth, reducing gassing, and extending battery life.
- Patented UL Recognized Flamearresting vents in each cell for safety and long life.
- Designed with the same recombination, thermal runaway prevention, gassing and flame retardant characteristics of the Bellcore 4228 compliant Dynasty Telecom products.
- Flame retardant polypropylene case and cover compliant with UL94V-2

- Proprietary Fixed Orifice Plate Pasting technology applying active materials on both sides of the grid for consistent cell-to-cell performance, higher capacity and uniform grid protection.
- Thermally welded case-to-cover bond to eliminate leakage.
- Can be operated in any orientation. Upright, side or end mounting recommended.
- Not restricted for air transport Complies with IATA/ICAO Special Provisions A67.
- Not restricted for surface transport -Classified as non-hazardous material as related to DOT-CFR Title 49 parts 171-189.
- Not restricted for water transport -Classified as non-hazardous material per IMDG Amendment 27.

TECHNICAL DATA

| | Constant Power Discharge Ratings - Watts per Cell @ 25°C (77°F) | | | | | | | | | | 20 hour | IEC Rating: |
|--------------|---|--|-----|-----|-----|-----|-----|-----|-----|-----|---------------|-----------------------|
| Model | | Operating Time (in minutes) to 1.67 Volts per Cell | | | | | | | | | | |
| Wodei | 5 | 10 | 15 | 20 | 30 | 40 | 45 | 50 | 60 | 90 | VPC @ 25°C | to 1.80 VPC @ 20°C |
| UPS12-400MRX | 674 | 517 | 408 | 339 | 261 | 218 | 196 | 183 | 159 | 113 | 109 AH | 97 AH |

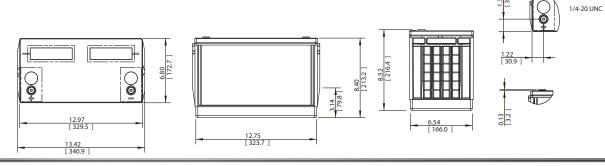
| Cells Per Unit | Voltage Per Unit | Weight (Kg) | 1 Min Current to 1.75VPC (Amps) | Short Circuit Current (Amps) | Internal Resistance (mOhms) | |
|----------------|------------------|----------------|---------------------------------|------------------------------|-----------------------------|--|
| 6 | 12.98 | 35.3 | 572 | 3059 | 4.06 | |



SPECIFICATIONS

| Operating Temperature Range with temperature compensation | Discharge: -40°F (-40°C) to +160°F (71°C) Charge: -10°F (-23°C) to +140°F (60°C) |
|---|---|
| Nominal Operating Temperature Range | +74°F (23°C) to +80°F (27°C) |
| Recommended Maximum Charging Current Limit | C/5 amperes @ 20hr rate |
| Float Charging Voltage | 13.65 ± 0.15 VDC average per 12V unit |
| Maximum AC Ripple (Charger) | 0.5% RMS or 1.5% P-P of float charge voltage recommended for best results. Max voltage allowed = 1.4% RMS (4% P-P) Max current allowed = C/20 |
| Self Discharge | Battery can be stored up to 6 months at 77°F (25°C) before a freshening charge is required. Batteries stored at temperatures greater than 77°F (25°C) will require recharge sooner than batteries stored at lower temperatures. See C&D brochure 41-7272, Self-Discharge and Inventory Control for details. |
| Equalize charge and cycle service voltage | 14.40 to 14.80 VDC average per 12V unit @ 77°F (25°C) |
| Terminal | Threaded copper alloy insert terminal to accept 1/4-20 UNC bolt. |
| Terminal Hardware Initial Torque | 110 inlbs. (12.4 N-m) |





CONSTANT POWER DISCHARGE RATINGS

| Constant Power Discharge Ratings - Watts Per Cell @ 20°C (68°F) | | | | | | | | | | | | | |
|---|--|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|--|
| | Operating Time To End Voltage (in minutes) | | | | | | | | | | | | |
| End Point | | | | | | | | | | | | | |
| Volts/Cell | 5 | 10 | 15 | 20 | 30 | 40 | 45 | 50 | 60 | 90 | | | |
| 1.75 | 602 | 454 | 363 | 305 | 239 | 201 | 182 | 172 | 151 | 107 | | | |
| 1.70 | 624 | 473 | 376 | 314 | 244 | 205 | 185 | 174 | 152 | 108 | | | |
| 1.67 | 634 | 486 | 383 | 319 | 247 | 207 | 186 | 175 | 153 | 108 | | | |
| 1.65 | 639 | 491 | 387 | 322 | 250 | 208 | 188 | 176 | 153 | 109 | | | |

| Constant Power Discharge Ratings - Watts Per Cell @ 77°F (25°C) | | | | | | | | | | | | |
|---|--|-----|------|------|-----|-----|-----|-----|-----|-----|--|--|
| | Operating Time To End Voltage (in minutes) | | | | | | | | | | | |
| End Point | | | | | | | | | | | | |
| Volts/Cell | 5 | 10 | 15 | 20 | 30 | 40 | 45 | 50 | 60 | 90 | | |
| 1.75 | 640 | 483 | 386 | 324 | 252 | 212 | 191 | 180 | 157 | 111 | | |
| 1.70 | 664 | 503 | 400 | 333 | 258 | 215 | 194 | 182 | 158 | 112 | | |
| 1.67 | 674 | 517 | 408 | 339 | 261 | 218 | 196 | 183 | 159 | 113 | | |
| 1.65 | 670 | 522 | /112 | 3/12 | 264 | 210 | 107 | 19/ | 160 | 113 | | |

CONSTANT CURRENT DISCHARGE RATINGS

| Constant Current Discharge Ratings - Amperes @ 20°C (68°F) | | | | | | | | | | | | |
|--|--|------|------|------|------|------|------|------|------|--|--|--|
| | Operating Time To End Point Voltage (in hours) | | | | | | | | | | | |
| End Point | | | | | | | | | | | | |
| Volts/Cell | 1 | 2 | 3 | 5 | 8 | 10 | 12 | 20 | 24 | | | |
| 1.85 | 71.9 | 38.9 | 27.2 | 17.3 | 11.4 | 9.41 | 8.00 | 5.08 | 4.32 | | | |
| 1.80 | 75.5 | 40.7 | 28.4 | 18.0 | 11.9 | 9.76 | 8.29 | 5.25 | 4.46 | | | |
| 1.75 | | | | | | | | | | | | |
| | | | | | | | | | | | | |

| Constant Current Discharge Ratings - Amperes @ 77°F (25°C) Operating Time To End Point Voltage (in hours) | | | | | | | | | | | |
|---|------|------|------|------|------|------|------|------|------|--|--|
| End Point Volts/Cell | | | | | | | 24 | | | | |
| 1.85 | 74.8 | 40.4 | 28.2 | 17.9 | 11.8 | 9.7 | 8.21 | 5.21 | 4.43 | | |
| 1.80 | 78.7 | 42.3 | 29.4 | 18.6 | 12.2 | 10.0 | 8.51 | 5.39 | 4.57 | | |
| 1 75 | 70.7 | 42 9 | 20.8 | 10 0 | 12.5 | 10.2 | 8 65 | 5.46 | 4.64 | | |