



**HIGH
RATE
MAX^{XT}**



UPS12-520MRX

Valve Regulated Lead Acid Battery

Designed for UPS Standby Power Applications

FEATURES AND BENEFITS

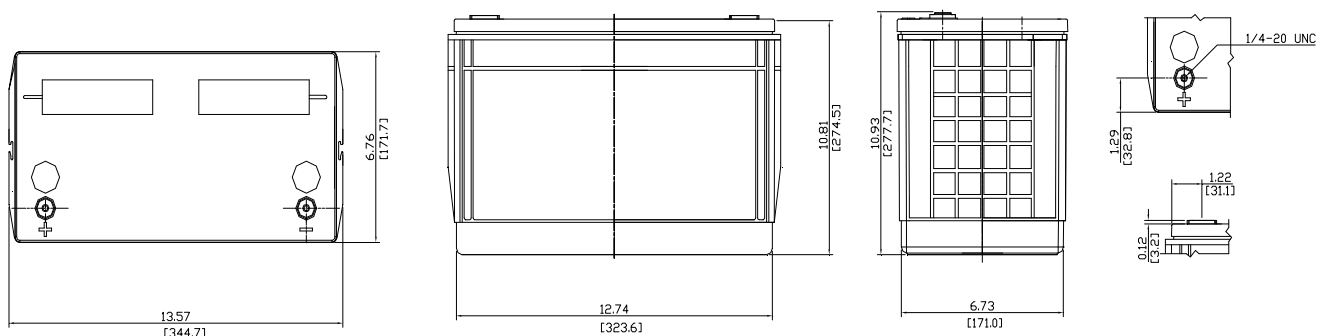
APPLICATIONS

- Data Centers
- Network Operation Centers
- Industrial Process Control Facilities
- Internet Housing Sites
- Semiconductor Manufacturing
- Banks and Financial Markets
- Power Generation Plants
- Hospital and Testing Laboratories
- Emergency Response Center

- 12 year design life @ 25°C
- Eurobat classification: Long life
- Absorbent Glass Mat (AGM) technology for efficient gas recombination of up to 99% and freedom from electrolyte maintenance.
- Patented Long Life Alloy having the lowest calcium levels in the industry - minimizing grid growth, reducing gassing, and extending battery life
- Patented UL Recognized Flame-arresting 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 durable polypropylene case and cover compliant with UL 1778 and UL94-V2
- 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 upright, side or end mounting orientation.
- 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.

Specifications

| Cells Per Unit | Voltage Per Unit | Weight | Watts/Cell @ 15min | 1 Min Current to 1.75VPC | IEC Short Circuit Current | IEC Resistance |
|----------------|------------------|---------|--------------------|--------------------------|---------------------------|----------------|
| 6 | 12V | 47.2 Kg | 520 | 715 Amps | 3586 Amps | 3.50 (mOhms) |



*All dimensions in inches and (millimeters). All dimensions are for reference only. Contact a C&D Representative for complete dimensional information.

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 in.-lbs. (12.4 N-m) |

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

Operating Time to End Point Voltage

| EPV | 5 min | 10 min | 15 min | 20 min | 25 min | 30 min | 45 min | 60 min | 90 min | 2 hr | 3 hr | 4 hr | 5 hr | 8 hr | 10 hr | 12 hr | 20 hr |
|------|-------|--------|--------|--------|--------|--------|--------|--------|--------|-------|------|------|------|------|-------|-------|-------|
| 1.85 | 577.3 | 483.2 | 397.4 | 344.7 | 308.6 | 282.0 | 219.0 | 183.0 | 132.0 | 104.7 | 74.4 | 58.3 | 48.2 | 32.0 | 26.3 | 22.3 | 14.2 |
| 1.80 | 700.1 | 566.0 | 456.3 | 388.4 | 342.8 | 309.5 | 239.2 | 199.2 | 141.1 | 110.5 | 78.3 | 61.5 | 51.4 | 33.5 | 27.3 | 23.1 | 14.5 |
| 1.75 | 783.7 | 611.0 | 487.4 | 411.5 | 360.7 | 324.0 | 247.8 | 204.8 | 144.7 | 113.1 | 79.9 | 62.5 | 52.0 | 34.0 | 27.8 | 23.6 | 14.9 |
| 1.70 | 843.3 | 647.7 | 510.5 | 427.5 | 372.4 | 332.8 | 252.2 | 207.1 | 146.2 | 114.2 | 80.6 | 63.3 | 52.4 | 34.2 | 28.0 | 23.7 | 15.0 |
| 1.67 | 884.2 | 665.5 | 525.0 | 437.4 | 379.7 | 338.2 | 254.8 | 208.5 | 147.1 | 114.8 | 81.0 | 63.6 | 52.6 | 34.4 | 28.1 | 23.8 | 15.0 |
| 1.65 | 913.6 | 677.7 | 534.8 | 444.3 | 384.7 | 342.0 | 257.1 | 209.9 | 147.8 | 115.2 | 81.3 | 63.9 | 52.8 | 34.5 | 28.2 | 23.9 | 15.0 |

Constant Current Discharge Table - Amps @ 25°C (77°F)

Operating Time to End Point Voltage

| EPV | 5 min | 10 min | 15 min | 30 min | 60 min | 90 min | 2 hr | 3 hr | 4 hr | 5 hr | 6 hr | 7 hr | 8 hr | 10 hr | 12 hr | 20 hr | 24 hr |
|------|-------|--------|--------|--------|--------|--------|------|------|------|------|------|------|------|-------|-------|-------|-------|
| 1.90 | 262.7 | 243.8 | 199.9 | 139.7 | 87.2 | 63.4 | 50.6 | 35.4 | 27.5 | 22.6 | 19.2 | 16.8 | 14.9 | 12.3 | 10.5 | 6.7 | 5.7 |
| 1.85 | 336.4 | 290.7 | 233.8 | 157.5 | 96.3 | 68.8 | 54.2 | 38.1 | 29.6 | 24.4 | 20.8 | 18.2 | 16.2 | 13.3 | 11.4 | 7.3 | 6.2 |
| 1.80 | 412.0 | 326.0 | 264.2 | 171.6 | 101.8 | 72.6 | 57.1 | 40.0 | 31.0 | 25.5 | 21.7 | 19.0 | 16.9 | 13.9 | 11.8 | 7.5 | 6.4 |
| 1.75 | 463.0 | 351.2 | 282.3 | 178.1 | 104.7 | 74.5 | 58.5 | 40.9 | 31.7 | 26.1 | 22.2 | 19.4 | 17.2 | 14.1 | 12.0 | 7.7 | 6.5 |

Note: Batteries to be mounted with 0.5 in. (1.25 cm) spacing minimum and free air ventilation. Specifications subject to change without notification.