



**HIGH  
RATE  
MAX<sup>XT</sup>**



# UPS12-520MRX

**Valve Regulated Lead Acid Battery**

**Designed for UPS Standby Power Applications**

## FEATURES AND BENEFITS

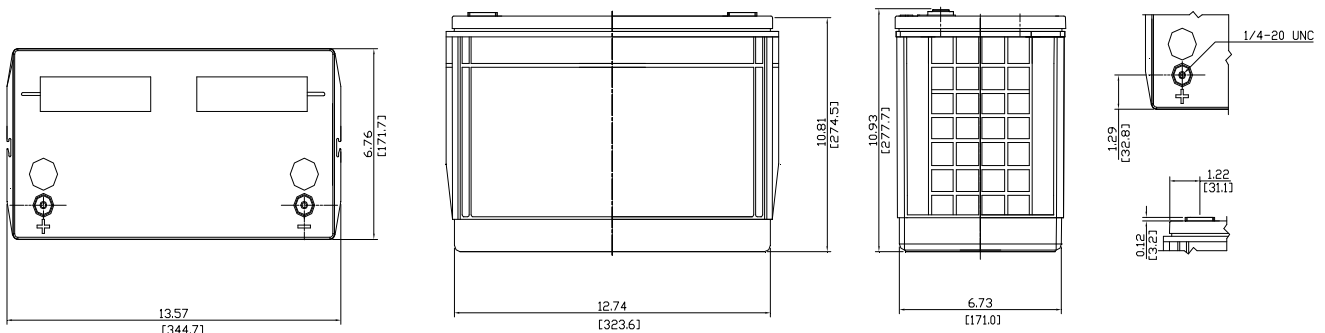
### APPLICATIONS

- 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.
- 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 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 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 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 parts171-189
- Not restricted for water transport - Classified as non-hazardous material per IMDG Amendment 27.

## Specifications

Cells Per Unit	Voltage Per Unit	Weight	Watts/Cell @ 15m in	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

<b>Operating Temperature Range with temperature compensation</b>	Discharge: -40° F (-40° C) to +160°F (71°C) Charge: -10°F (-23°C) to +140°F (60°C)
<b>Nominal Operating Temperature Range</b>	+74° F (23°C) to +80°F (27°C)
<b>Recommended Maximum Charging Current Limit</b>	C/5 amperes @ 20hr rate
<b>Float Charging Voltage</b>	13.65 ± 0.15 VDC average per 12V unit
<b>Maximum AC Ripple (Charger)</b>	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
<b>Self Discharge</b>	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.
<b>Equalize charge and cycle service voltage</b>	14.40 to 14.80 VDC average per 12V unit @ 77° F (25°C)
<b>Terminal</b>	Threaded copper alloy insert terminal to accept 1/4-20 UNC bolt
<b>Terminal Hardware Initial Torque</b>	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.