



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



# UPS12-320MRX

**Valve Regulated Lead Acid Battery  
Designed for UPS Standby Power Applications**

## FEATURES AND BENEFITS

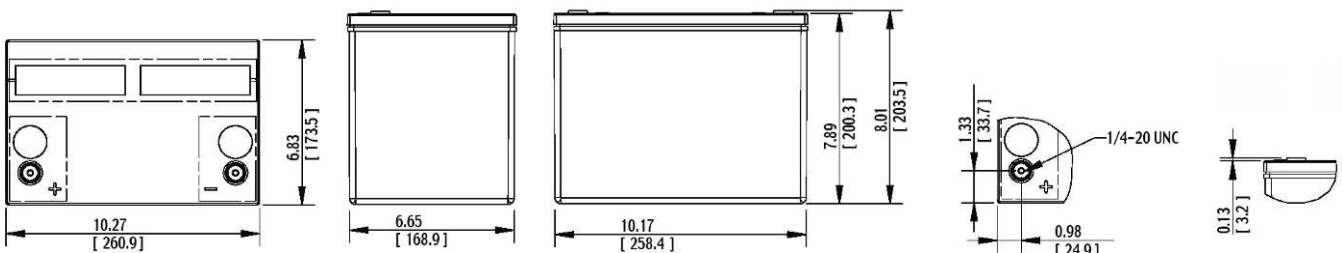
### APPLICATIONS

- 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

- 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, 41-9026)
- 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 UL 1778
- 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.

## Specifications

Cells Per Unit	Voltage Per Unit	Weight	Watts/Cell @ 15min	1 Min Current to 1.75VPC	Short Circuit Current	Resistance
6	12.98V	27 Kg	320	500 Amps	2381 Amps	5.29 (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. (6.75 to 6.90 per 6V 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) (7.20 to 7.40 VDC per 6V unit.)
<b>Terminal: Inserted</b>	Threaded copper alloy insert terminal to accept 10-32 UNF bolt for all models below UPS12-220MRX. 1/4-20 UNC bolt for all models above UPS12-280MRX
<b>Terminal Hardware Initial Torque: Inserted Terminal</b>	30 in.-lbs. (3.4 N-m) for all models below UPS12-220MRX. 110 in.-lbs. (12.4 N-m) for all models above UPS120-280MRX.

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

#### Operating Time to End Point Voltage

End Voltage Per Cell	Min					Hour											
	5	10	15	30	60	2	3	4	5	6	7	8	9	10	12	20	24
1.85	458.4	346.7	277.8	176.9	110.7	64.2	44.5	34.4	28.1	23.9	20.8	18.4	16.6	15.1	12.8	8.1	6.8
1.80	502.6	378.1	304.6	188.6	115.9	66.7	46.2	35.6	29.1	24.7	21.5	19.0	17.1	15.5	13.2	8.3	7.0
1.78	514.0	386.4	308.4	191.4	116.9	67.1	46.5	35.8	29.3	24.8	21.6	19.1	17.2	15.6	13.2	8.3	7.1
1.75	526.2	395.1	314.2	194.0	118.5	67.9	47.0	36.2	29.5	25.0	21.8	19.3	17.3	15.8	13.4	8.4	7.1
1.73	529.3	399.5	318.2	196.9	118.6	68.0	47.1	36.3	29.6	25.1	21.8	19.3	17.4	15.8	13.4	8.4	7.1
1.70	535.3	406.2	321.4	198.6	118.8	68.3	47.3	36.4	29.7	25.2	21.9	19.4	17.4	15.8	13.4	8.4	7.2
1.67	544.3	413.0	326.3	200.4	119.0	68.6	47.4	36.5	29.8	25.3	22.0	19.5	17.5	15.9	13.5	8.5	7.2
1.65	547.5	417.7	329.3	202.7	119.4	68.8	47.6	36.6	29.9	25.3	22.0	19.5	17.5	15.9	13.5	8.5	7.2

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

#### Operating Time to End Point Voltage

End Voltage Per Cell	Min					Hour											
	5	10	15	30	60	2	3	4	5	6	7	8	9	10	12	20	24
1.94	145.8	145.8	118.6	78.6	47.5	26.3	18.6	14.6	12.0	10.2	8.8	7.8	7.0	6.4	5.4	3.4	2.8
1.90	200.2	170.7	135.2	87.3	53.4	29.4	20.7	16.2	13.4	11.4	9.8	8.7	7.8	7.1	6.0	3.7	3.1
1.85	248.3	185.0	150.5	95.9	58.0	31.8	22.4	17.5	14.5	12.3	10.6	9.4	8.4	7.6	6.5	4.0	3.4
1.83	256.0	188.9	155.2	98.2	59.1	32.3	22.7	17.8	14.7	12.5	10.8	9.5	8.6	7.8	6.5	4.1	3.4
1.80	267.8	196.8	162.3	101.8	60.7	33.1	23.3	18.2	15.1	12.8	11.1	9.8	8.7	7.9	6.7	4.1	3.5
1.78	272.8	199.4	165.3	103.2	61.2	33.4	23.4	18.3	15.2	12.8	11.1	9.8	8.8	8.0	6.7	4.2	3.5
1.75	277.5	203.2	168.2	105.4	62.0	33.8	23.7	18.5	15.4	13.0	11.2	9.9	8.9	8.0	6.8	4.2	3.5
1.70	282.8	207.6	171.4	106.9	62.5	34.0	23.8	18.6	15.4	13.0	11.3	10.0	8.9	8.1	6.8	4.2	3.6

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