



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



# UPS12-400MRX

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

## FEATURES AND BENEFITS

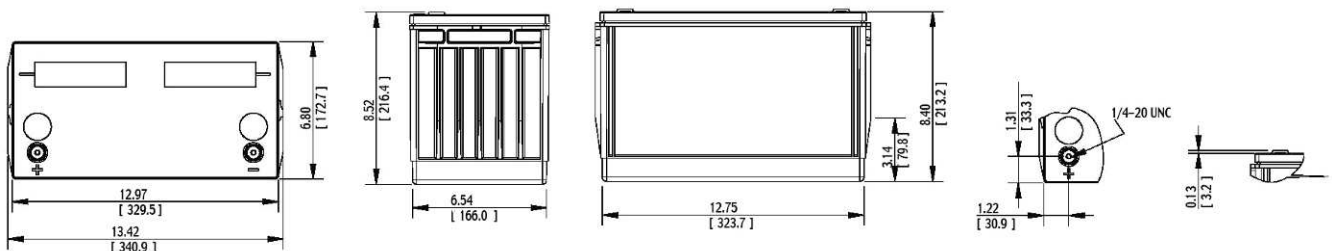
### APPLICATIONS

- 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	35.3 Kg	400	572 Amps	3059 Amps	4.06 (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 UPS12-280MRX.

### 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	547.6	411.9	338.7	226.0	146.5	81.9	58.3	45.8	38.0	32.8	28.5	25.2	22.6	20.5	17.3	10.8	9.1
1.80	614.9	461.7	372.7	241.0	153.9	85.6	60.7	47.6	39.4	34.0	29.6	26.2	23.5	21.3	17.9	11.2	9.4
1.78	630.8	471.2	380.0	245.0	155.2	86.2	61.1	47.9	39.6	34.3	29.8	26.3	23.6	21.4	18.0	11.2	9.5
1.75	640.3	483.1	386.1	252.4	157.2	87.2	61.8	48.4	40.0	34.4	30.0	26.6	23.8	21.6	18.2	11.3	9.5
1.73	649.8	494.2	392.0	254.6	157.7	87.5	62.0	48.5	40.1	34.5	30.2	26.7	23.9	21.6	18.2	11.3	9.5
1.70	664.0	502.9	399.8	257.9	158.5	87.9	62.2	48.7	40.3	34.5	30.3	27.0	24.1	21.8	18.4	11.3	9.5
1.67	674.0	516.7	407.7	261.4	159.3	88.3	62.5	48.9	40.5	34.7	30.4	27.1	24.2	21.9	18.4	11.4	9.6
1.65	679.3	522.4	411.6	263.7	159.8	88.6	62.7	49.1	40.6	34.7	30.5	27.1	24.3	22.0	18.5	11.4	9.6

### 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	149.3	149.3	136.4	97.0	59.5	32.4	22.8	17.7	14.6	12.4	10.9	9.7	8.7	8.0	6.8	4.3	3.7
1.90	214.4	201.5	162.3	109.9	68.2	36.9	25.8	20.0	16.4	14.0	12.2	10.8	9.8	8.9	7.6	4.8	4.1
1.85	295.7	236.8	189.0	122.2	74.8	40.4	28.2	21.8	17.9	15.2	13.3	11.8	10.6	9.7	8.2	5.2	4.4
1.83	318.7	246.4	197.1	125.6	76.4	41.2	28.7	22.2	18.2	15.5	13.5	12.0	10.8	9.8	8.3	5.3	4.5
1.80	346.5	262.6	210.0	131.0	78.7	42.3	29.4	22.7	18.6	15.8	13.8	12.2	11.0	10.0	8.5	5.4	4.6
1.78	356.2	270.5	215.9	133.1	79.5	42.7	29.7	22.9	18.8	15.9	13.9	12.3	11.1	10.1	8.6	5.4	4.6
1.75	363.0	277.5	220.0	134.8	79.7	42.9	29.8	23.2	19.0	16.1	14.0	12.5	11.2	10.2	8.6	5.5	4.6
1.70	376.2	286.9	228.0	139.0	79.9	43.1	30.0	23.2	19.1	16.2	14.1	12.5	11.3	10.3	8.8	5.6	4.7

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