

# DYNASTY® HIGH RATE MAX



## UPS12-600MRX

**Valve Regulated Lead Acid Battery**

**Designed for UPS Standby Power Applications.**

### APPLICATIONS

- Data Centers
- Network Operations Centers
- Industrial Process Control Facilities
- Internet Hosting 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.
- 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 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.
- Eurobat Classification: Long life

### TECHNICAL DATA

	Constant Power Discharge Ratings - Watts per Cell @ 25°C (77°F)										20 hour rate to 1.75 VPC @ 25°C	IEC Rating: 10 hour rate to 1.80 VPC @ 20°C
Model	Operating Time (in minutes) to 1.67 Volts per Cell											
	5	10	15	20	30	40	45	50	60	90		
UPS12-600MRX	969	745	601	486	361	299	268	251	217	153	147 AH	135 AH

Cells Per Unit	Nominal Voltage	Weight Lbs. (Kg)	1 Min Current to 1.75VPC (Amps)	IEC Short Circuit Current (Amps)	IEC Internal Resistance (mOhms)	Dynasty* Short Circuit Current (Amps) @ .1 Sec
6	12	109 (49.4)	828	3640	3.45	6448

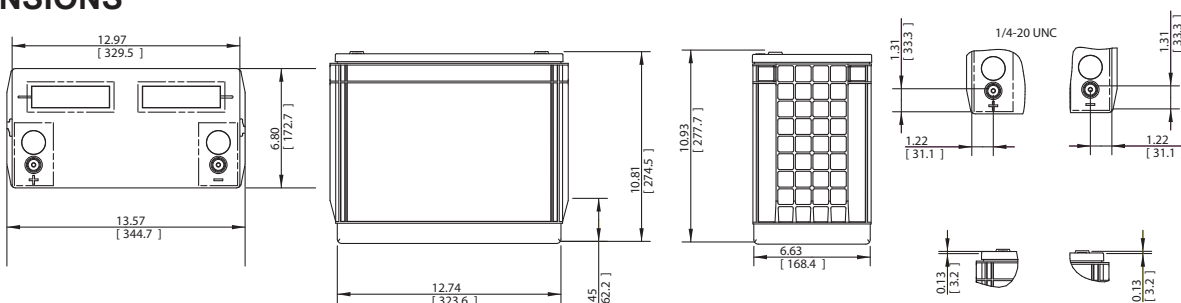
\* Same method as High Rate Series & High Rate Max Series

Additional ratings and application information are available in the Battery Selection Program found at [www.cdstandbypower.net](http://www.cdstandbypower.net)

## 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 <sub>20</sub> /5 amperes (29.4A)
<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)

## DIMENSIONS



All dimensions are in inches and [millimeters].

## 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	816	641	518	427	326	274	247	233	204	145
1.70	872	681	548	447	336	280	252	237	206	
1.67	911	700	565	458	342	284	255			
1.65	939									

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	868	682	551	453	345	288	259	244	212	151
1.70	928	725	583	475	355	295	265	248	215	152
1.67	969	745	601	486	361	299	268	251	217	153
1.65	999	756	608	492	365	302	270	253	218	154

**Note:** Batteries to be mounted with 0.5 in. (1.25cm) spacing minimum and free air ventilation. Specifications subject to change without notification. Above ratings do not include inter-unit connector voltage drops. Additional ratings and application information are available in the Battery Selection Program found at [www.cdstandbypower.net](http://www.cdstandbypower.net)

## 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	94.1	53.0	37.5	24.3	16.0	13.0	11.0	6.76	5.70
1.80	99.7	55.8	39.3	25.4	16.6	13.5	11.4	7.06	5.95
1.75	102	56.8	40.2	25.8	16.9	13.8	11.6	7.18	6.05

Constant Current Discharge Ratings - Amperes @ 77°F (25°C)									
Operating Time To End Point Voltage (in hours)									
End Point Volts/Cell	1	2	3	5	8	10	12	20	24
1.85	98.0	55.1	38.8	25.1	16.5	13.3	11.2	6.94	5.84
1.80	104	58.0	40.7	26.3	17.1	13.9	11.7	7.24	6.11
1.75	106	59.0	41.7	26.7	17.4	14.1	11.9	7.36	6.20

**Note:** Batteries to be mounted with 0.5 in. (1.25cm) spacing minimum and free air ventilation. Specifications subject to change without notification. Above ratings do not include inter-unit connector voltage drops. Additional ratings and application information are available in the Battery Selection Program found at [www.cdstandbypower.net](http://www.cdstandbypower.net)

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