



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



## UPS12-490MRX

**Valve Regulated Lead Acid Battery**

**Designed for UPS Standby Power Applications.**

### FEATURES & BENEFITS

#### APPLICATIONS

- Data Centers
- Network Operations Centers
- Industrial Process Control Facilities
- Internet Housing Sites
- Semiconductor Manufacturing
- Banks & Financial Markets
- Power Generation Plants
- Hospitals & Testing Laboratories
- Emergency 911 Response Centers

- Eurobat Classification: Long life
- > 12 year design life @ 20°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, 41-9027)
- 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 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.

### TECHNICAL DATA

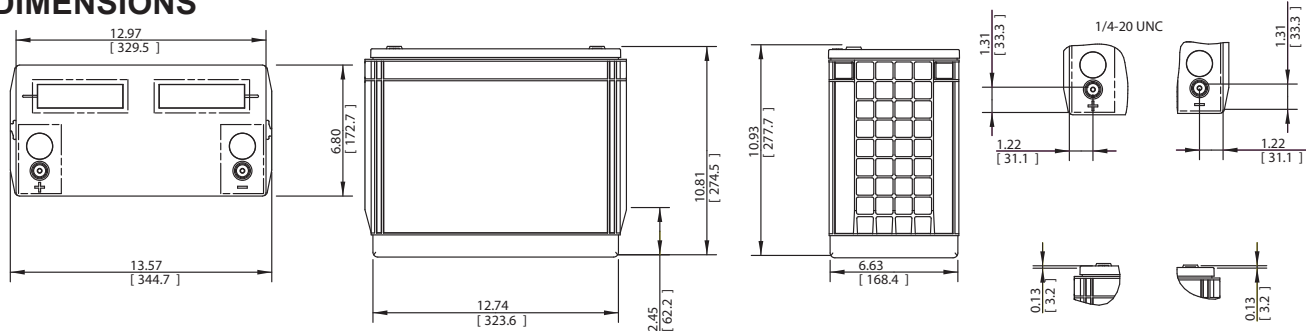
Model	Constant Power Discharge Ratings - Watts per Cell @ 25°C (77°F)										20 hour rate to 1.75 VPC @ 25°C	IEC Rating: 10 hour rate to 1.80 VPC @ 20°C
	Operating Time (in minutes) to 1.67 Volts per Cell											
	5	10	15	20	30	40	45	50	60	90		
UPS12-490MRX	794	624	495	411	317	265	239	224	195	141	149 AH	134 AH

Cells Per Unit	Voltage Per Unit	Weight (Kg)	1 Min Current to 1.75VPC (Amps)	Short Circuit Current (Amps)	Internal Resistance (mOhms)
6	12.98	46.6	599	3160	3.96

## 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)

## DIMENSIONS



## 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	653	527	423	357	282	240	218	206	182	133
1.70	708	567	450	377	294	248	225	212	186	135
1.67	747	587	465	388	300	252	227	214	187	135
1.65	776	605	475	395	304	254	229	216	188	136

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	695	561	449	379	298	252	229	216	190	139
1.70	753	603	479	400	311	261	236	222	194	140
1.67	794	624	495	411	317	265	239	224	195	141
1.65	825	643	506	419	321	267	241	226	196	141

## 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	87.8	49.7	35.7	23.4	15.8	13.0	11.0	6.91	5.86
1.80	93.3	52.4	37.4	24.4	16.4	13.4	11.4	7.15	6.05
1.75	94.6	52.9	38.0	25.0	16.8	13.7	11.6	7.29	6.16

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	91.5	51.6	36.9	24.2	16.3	13.3	11.3	7.09	6.01
1.80	97.2	54.4	38.7	25.2	16.9	13.8	11.7	7.33	6.21
1.75	98.5	55.0	39.4	25.8	17.3	14.1	11.9	7.47	6.32

## C&D TECHNOLOGIES, INC.

1400 Union Meeting Road  
P.O. Box 3053 • Blue Bell, PA 19422-0858  
(215) 619-2700 • Fax (215) 619-7899 • (800) 543-8630  
customersvc@cdtechno.com  
www.cdtechno.com

Any data, descriptions or specifications presented herein are subject to revision by C&D Technologies, Inc. without notice. While such information is believed to be accurate as indicated herein, C&D Technologies, Inc. makes no warranty and hereby disclaims all warranties, express or implied, with regard to the accuracy or completeness of such information. Further, because the product(s) featured herein may be used under conditions beyond its control, C&D Technologies, Inc. hereby disclaims all warranties, either express or implied, concerning the fitness or suitability of such product(s) for any particular use or in any specific application or arising from any course of dealing or usage of trade. The user is solely responsible for determining the suitability of the product(s) featured herein for user's intended purpose and in user's specific application.