



**HIGH
RATE
MAX^{XT}**

UPS12-220MRX

Valve Regulated Lead Acid Battery

Designed for UPS Standby Power Applications



FEATURES AND BENEFITS

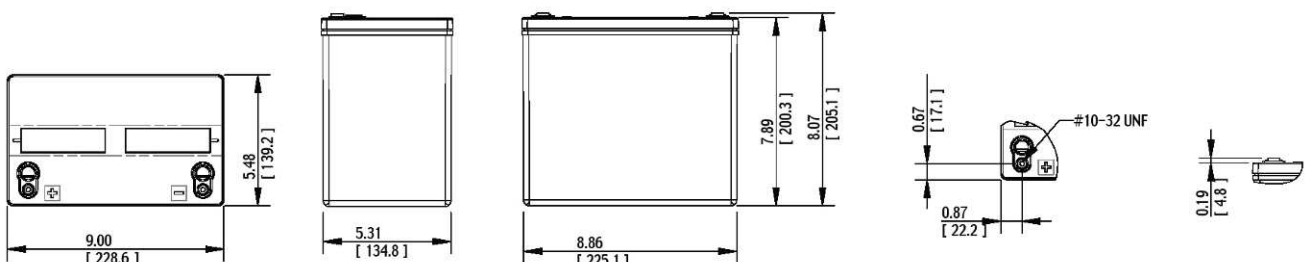
APPLICATIONS

- 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, 41-9027)
- 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 @ 15min	1 Min Current to 1.75VPC	Short Circuit Current	Resistance
6	12.98V	19 Kg	220	383 Amps	1985 Amps	6.37 (mOhms)



*All dimensions in inches and (millimeters). All dimensions are for reference only. Contact a C&D Representative for complete dimensional information.

Specifications

Operating Temperature Range with temperature compensation	Discharge: -40° F (-40° C) to +160° F (71° C) Charge: -10° F (-23° C) to +140° F (60° C)
Nominal Operating Temperature Range	+74° F (23° C) to +80° F (27° C)
Recommended Maximum Charging Current Limit	C/5 amperes @ 20hr rate
Float Charging Voltage	13.65 ± 0.15 VDC average per 12V unit
Maximum AC Ripple (Charger)	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
Self Discharge	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.
Equalize charge and cycle service voltage	14.40 to 14.80 VDC average per 12V unit @ 77° F (25° C)
Terminal	Threaded copper alloy insert terminal to accept #10-32 UNF bolt
Terminal Hardware Initial Torque	30 in.-lbs. (3.4 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	305.1	229.7	184.9	154.0	133.6	119.0	90.8	75.0	54.1	42.9	29.7	22.8	18.6	12.1	9.9	8.4	5.3
1.80	336.9	255.6	202.2	166.3	142.9	126.3	95.4	78.2	56.2	44.5	30.7	23.6	19.3	12.5	10.2	8.7	5.4
1.75	355.0	267.5	211.0	172.5	147.6	129.9	96.9	78.7	57.1	45.5	31.4	24.1	19.7	12.8	10.4	8.8	5.5
1.70	366.6	273.8	217.0	176.3	150.0	131.5	97.9	79.4	57.5	45.7	31.5	24.2	19.7	12.8	10.5	8.9	5.5
1.67	371.6	277.6	220.0	178.2	151.3	132.4	98.5	79.8	57.7	45.8	31.6	24.3	19.8	12.9	10.5	8.9	5.6
1.65	375.0	280.2	222.0	179.5	152.2	133.0	98.8	80.0	57.9	46.0	31.7	24.3	19.8	12.9	10.5	8.9	5.6

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	153.3	119.2	95.6	60.8	35.0	24.5	19.0	13.3	10.3	8.4	7.1	6.2	5.5	4.5	3.8	2.4	2.1
1.85	176.4	130.9	106.9	66.9	38.6	26.9	20.8	14.5	11.2	9.1	7.7	6.7	6.0	4.9	4.1	2.6	2.2
1.80	189.7	139.7	115.0	71.0	39.8	27.7	21.4	14.9	11.5	9.5	8.0	7.0	6.2	5.1	4.3	2.7	2.3
1.75	197.4	145.0	119.6	72.4	40.7	28.3	21.9	15.2	11.8	9.6	8.2	7.1	6.3	5.2	4.4	2.8	2.4

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