



**HIGH
RATE
MAX^{XT}**



UPS12-320R MRX

Valve Regulated Lead Acid Battery

Designed for UPS Standby Power Applications

FEATURES AND BENEFITS

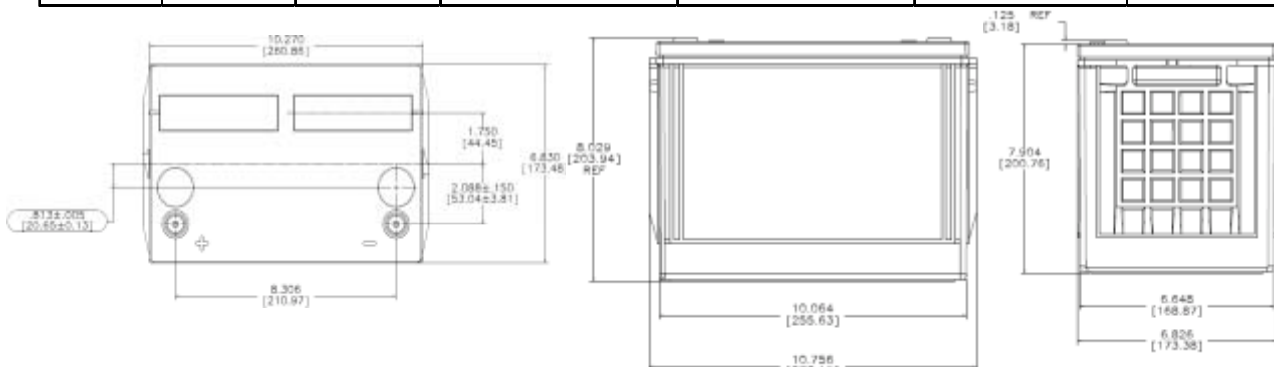
APPLICATIONS

- 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

- 12 year design life @ 25°C
- Eurobat Classification: Long Life
- 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 durable polypropylene case and cover compliant with UL 1778 and UL94-V2
- 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 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 @ 15m in	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

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 4 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 1/4-20 UNC bolt
Terminal Hardware Initial Torque	110 in.-lbs. (12.4 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	458.4	346.7	277.8	230.4	199.2	176.9	134.5	110.7	80.5	64.2	44.5	34.4	28.1	18.4	15.1	12.8	8.1
1.80	502.6	378.1	304.6	249.7	213.9	188.6	141.9	115.9	83.9	66.7	46.2	35.6	29.1	19.0	15.5	13.2	8.3
1.75	526.2	395.1	314.2	257.2	220.2	194.0	145.4	118.5	85.5	67.9	47.0	36.2	29.5	19.3	15.8	13.4	8.4
1.70	535.3	406.2	321.4	263.2	225.4	198.6	147.0	118.8	85.9	68.3	47.3	36.4	29.7	19.4	15.8	13.4	8.4
1.67	544.3	413.0	326.3	266.6	227.8	200.4	147.7	119.0	86.2	68.6	47.4	36.5	29.8	19.5	15.9	13.5	8.5
1.65	547.5	417.7	329.3	269.3	230.3	202.7	148.7	119.4	86.5	68.8	47.6	36.6	29.9	19.5	15.9	13.5	8.5

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	200.2	170.7	135.2	87.3	53.4	37.6	29.4	20.7	16.2	13.4	11.4	9.8	8.7	7.1	6.0	3.7	3.1
1.85	248.3	185.0	150.5	95.9	58.0	40.8	31.8	22.4	17.5	14.5	12.3	10.6	9.4	7.6	6.5	4.0	3.4
1.80	267.8	196.8	162.3	101.8	60.7	42.6	33.1	23.3	18.2	15.1	12.8	11.1	9.8	7.9	6.7	4.1	3.5
1.75	277.5	203.2	168.2	105.4	62.0	43.5	33.8	23.7	18.5	15.4	13.0	11.2	9.9	8.0	6.8	4.2	3.5

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