



**HIGH
RATE
MAX^{XT}**



UPS12-440MRX

Valve Regulated Lead Acid Battery

Designed for UPS Standby Power Applications

FEATURES AND BENEFITS

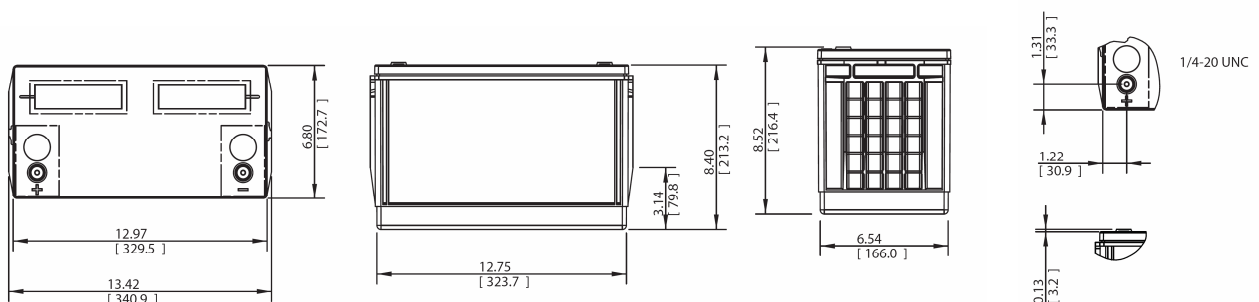
APPLICATIONS

- 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 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	IEC Short Circuit Current	IEC Resistance
6	12V	36 Kg	440	588 Amps	3183 Amps	3.96 (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 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	570.9	437.8	346.0	292.1	256.2	230.1	179.1	149.9	109.2	87.2	61.4	47.8	39.4	26.4	21.5	18.1	11.3
1.80	635.6	485.2	385.2	320.0	277.2	246.5	189.5	157.2	113.6	90.2	63.6	49.6	40.8	27.1	22.1	18.7	11.7
1.75	680.3	521.3	412.3	339.2	291.5	257.5	195.1	160.2	114.7	90.5	64.1	50.2	41.5	27.6	22.4	19.0	11.8
1.70	704.4	538.4	426.9	349.2	298.7	263.0	199.0	163.2	116.1	91.2	64.5	50.5	41.7	27.7	22.6	19.1	11.9
1.67	719.2	552.3	435.9	355.4	303.2	266.4	201.1	164.7	116.9	91.6	64.8	50.7	41.9	27.8	22.6	19.1	11.9
1.65	729.3	561.8	442.0	359.5	306.3	268.7	202.7	166.0	117.5	91.9	65.0	50.8	42.0	27.9	22.7	19.2	11.9

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	237.6	228.1	179.9	118.4	71.7	51.6	40.8	28.6	22.1	18.1	15.4	13.4	11.9	9.8	8.3	5.3	4.5
1.85	296.4	251.3	203.7	131.2	78.0	56.1	44.4	31.0	24.0	19.6	16.7	14.5	12.9	10.5	8.9	5.7	4.8
1.80	364.3	277.4	222.3	140.2	81.0	58.0	45.8	31.9	24.8	20.3	17.3	15.1	13.4	11.0	9.3	5.9	5.1
1.75	407.4	297.0	233.0	145.0	83.0	59.2	46.6	32.7	25.3	20.7	17.6	15.4	13.6	11.2	9.5	6.0	5.1

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