



**HIGH
RATE
MAX^{XT}**



UPS12-280R MRX

Valve Regulated Lead Acid Battery

Designed for UPS Standby Power Applications

FEATURES AND BENEFITS

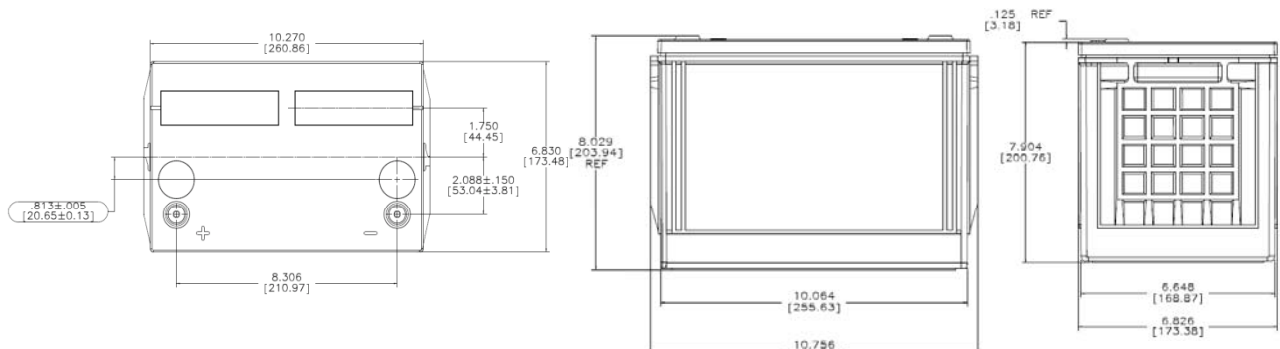
APPLICATIONS

- 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 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	25.7 Kg	280	475 Amps	2099 Amps	5.99 (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	364.2	280.3	229.9	193.8	169.7	152.2	118.3	98.9	73.6	59.7	42.2	33.0	27.3	18.2	14.9	12.6	7.9
1.80	413.6	312.0	255.8	212.6	184.2	163.9	125.7	104.1	76.8	61.9	43.7	34.1	28.2	18.9	15.4	13.0	8.1
1.75	452.8	333.8	272.0	224.8	193.8	171.7	130.3	107.1	78.5	63.0	44.4	34.7	28.6	19.2	15.6	13.2	8.2
1.70	473.0	345.1	279.0	230.1	198.1	175.3	132.4	108.5	79.3	63.4	44.7	34.9	28.8	19.3	15.7	13.3	8.3
1.67	481.6	351.4	284.0	234.0	201.3	178.0	133.9	109.4	79.7	63.7	44.9	35.0	28.9	19.4	15.7	13.3	8.3
1.65	494.6	358.2	288.0	236.9	203.5	179.8	135.2	110.4	80.3	64.0	45.1	35.3	29.1	19.4	15.8	13.3	8.3

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	179.6	146.8	121.5	80.6	49.5	34.8	27.1	19.0	14.8	12.2	10.4	9.1	8.1	6.7	5.7	3.6	3.1
1.85	226.6	171.2	137.3	88.8	54.3	38.1	29.6	20.7	16.1	13.2	11.3	9.8	8.8	7.2	6.1	3.9	3.3
1.80	247.9	186.0	150.3	93.9	57.0	40.0	31.1	21.8	16.9	13.9	11.8	10.3	9.2	7.5	6.4	4.1	3.5
1.75	258.9	194.4	156.9	96.4	57.8	40.6	31.7	22.2	17.2	14.1	12.0	10.5	9.3	7.7	6.5	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.