



EverExceed® Patented Robust AGM Technology

ST-12110
VALVE REGULATED
LEAD ACID BATTERY
FOR TELECOM / ELECTRIC
UTILITY APPLICATIONS
12V 110 AH @ 10 HR to 1.80VPC
12V 124 AH @ 20 HR to 1.75VPC

**LONG
DURATION**

**HIGH
PERFORMANCE**



Innovative Features

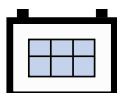
- ◆ Thick positive plate design for maximum service float life 12 years design life @ 20°C(68°F).
- ◆ Valve regulated lead acid battery (VRLA).
- ◆ High-Compression Absorbed Glass Mat technology (AGM) for greater than 99% recombination efficiency.
- ◆ Proprietary Fixed Orifice Plate Pasting technology applying active materials on both sides of the grid for consistent cell-to-cell performance, higher capacity and uniform grid protection.
- ◆ Operates at a low internal pressure.
- ◆ Heavy duty insert copper alloy terminals for ease of assembly, reduced maintenance and increased safety.
- ◆ Advanced lead tin calcium alloy, reduces grid corrosion and promotes long battery life.
- ◆ Over-sized, through the partition inter-cell welds provide low resistance connections, with minimal power loss.
- ◆ Flame arresting, low pressure safety release venting system for individual cells, recognized per U.L. 924.
- ◆ Multicell design for ease of installation and maintenance
- ◆ Horizontal or vertical operation.
- ◆ **Standard:**
Reinforced ABS (UL 94HB) container and cover
Optional:
Flame-retardant reinforced ABS container and cover compliant with U.L.94 V-0 with an Oxygen limiting Index of greater than 28%.

12 VOLTS - 110 AMPERE HOUR @ 10 HOUR RATE

AH Capacity to 1.80VPC @ 68°F (20°C)

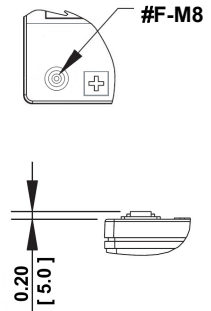
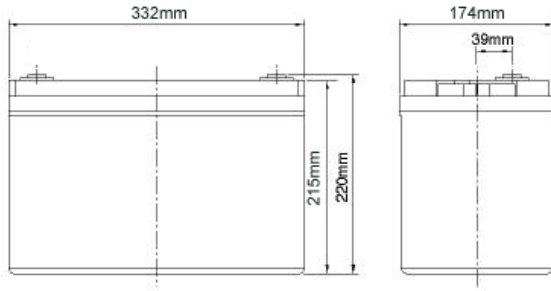
| End Point Volts/Cell | 60min | 1.5hr | 2hr | 3hr | 4hr | 5hr | 8hr | 10hr | 12hr | 20hr |
|-------------------------|-------|-------|------|------|------|------|-----|------|------|------|
| 1.80 | 72.6 | 80.3 | 84.0 | 85.4 | 93.8 | 97.3 | 106 | 110 | 112 | 121 |

For Telecom / Electric Utility Applications



Standard Range VRLA

EverExceed®
power your applications



Length: 332mm Width: 174mm Height: 220mm

| Electrical Specifications | | | | | | |
|---------------------------|------------------|----------------|-------------|------------------------------|-----------------------|--------------------------|
| Cells Per Unit | Voltage Per Unit | Weight | Electrolyte | Maximum Discharge Current@5s | Short Circuit Current | Internal Resistance (mΩ) |
| 6 | 12.84 | 69.3lbs 31.5kg | SG = 1.300 | 1320 Amps | 3000 Amps | 4.6 |

| | |
|---|---|
| Capacity | 124 Ah @ 20 hr. rate to 1.75 volts per cell @ 68°F (20°C). 110 Ah @ 10 hr. rate to 1.80 volts per cell @ 68°F (20°C). |
| Applicable Operating Temperature Range | -40°F (-40°C) to +158°F (70°C). |
| Ideal Operating Temperature Range | +68°F (+20°C) to +82.4°F (28°C). |
| Floating Charging Voltage | 13.5 to 13.8 VDC/unit Average at 68°F~77°F (20°C~25°C). |
| Recommended Maximum Charging Current Limit | 27.5 Amperes (0.25C10 Amperes) |
| Equalization and Cycle Service Charging Voltage | 14.1 to 14.4 VDC/unit Average at 68°F~77°F (20°C~25°C). |
| Maximum AC Ripple (Charger) | 0.5% RMS or 1.5% P-P of float charge voltage recommended for best results. Maximum voltage allowed = 1.4% RMS (4% P-P). Maximum current allowed = 0.55 amperes RMS (C/10). |
| Self Discharge | EverExceed Standard Range batteries may be stored for up to 12 months at 68°F~77°F (20°C~25°C) and then a freshening charge is required. For higher temperatures the time interval will be shorter. |
| Accessories | Inter unit connectors racks and cabinet systems are available. |
| Terminal: Inserted | Threaded copper alloy insert terminal |
| Terminal Hardware Initial Torque: Inserted Terminal | 11 N-m |

| Constant Power Discharging Ratings - Watts Per Cell @ 20°C (68°F) | | | | | | | | | | | | |
|---|-------|-------|-------|-------|------|------|------|------|------|------|------|------|
| End Point Volts/Cell | 15min | 30min | 60min | 1.5hr | 2hr | 3hr | 4hr | 5hr | 8hr | 10hr | 12hr | 20hr |
| 1.85 | 329 | 221 | 145 | 98.6 | 76.7 | 52.9 | 43.8 | 36.2 | 24.9 | 20.6 | 17.8 | 12.1 |
| 1.80 | 336 | 225 | 148 | 107 | 80.6 | 55.6 | 45.7 | 38.1 | 26.1 | 21.8 | 18.6 | 12.3 |
| 1.75 | 355 | 238 | 155 | 113 | 82.6 | 56.7 | 46.6 | 38.9 | 26.7 | 22.2 | 19.0 | 12.4 |

| Constant Current Discharging Ratings - Amperes Per Cell @ 20°C (68°F) | | | | | | | | | | | | |
|---|-------|-------|-------|-------|------|------|------|------|------|------|------|------|
| End Point Volts/Cell | 15min | 30min | 60min | 1.5hr | 2hr | 3hr | 4hr | 5hr | 8hr | 10hr | 12hr | 20hr |
| 1.85 | 177 | 116 | 71.1 | 49.3 | 39.5 | 27.1 | 22.2 | 18.3 | 12.4 | 10.3 | 8.84 | 5.72 |
| 1.80 | 181 | 118 | 72.6 | 53.5 | 41.9 | 28.8 | 23.4 | 19.5 | 13.3 | 11.0 | 9.35 | 6.05 |
| 1.75 | 195 | 120 | 73.6 | 57.1 | 43.0 | 29.4 | 24.2 | 19.9 | 13.6 | 11.3 | 9.61 | 6.22 |

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

