



EverExceed<sup>®</sup> Patented Robust AGM Technology

# ST-1228

VALVE REGULATED

LEAD ACID BATTERY

FOR TELECOM / ELECTRIC

UTILITY APPLICATIONS

12V 28.0 AH @ 10 HR to 1.80VPC

12V 35.8 AH @ 20 HR to 1.75VPC

# LONG DURATION

# HIGH PERFORMANCE



### Innovative Features

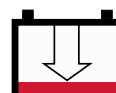
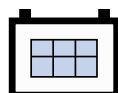
- ☑ Thick positive plate design for maximum service float life 12 years design life @ 20°C(68°F).
- ☑ UL Recognized component.
- ☑ Valve regulated lead acid battery (VRLA).
- ☑ High-Compression Absorbed Glass Mat technology (AGM) for greater than 99% recombination efficiency.
- ☑ Proprietary Fixed Orifice 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 - 28.0 AMPERE HOUR @ 10 HOUR RATE

AH Capacity to 1.80VPC @ 68°F (20°C)

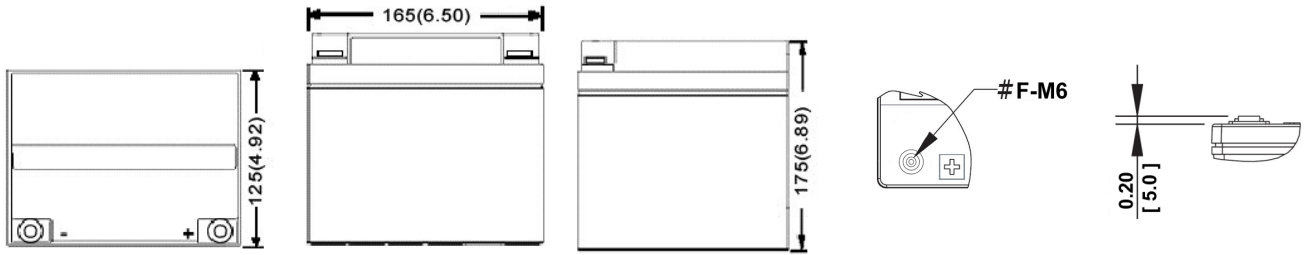
End Point Volts/Cell	1.5hr	2hr	3hr	4hr	5hr	8hr	10hr	12hr	20hr	24hr
1.80	21.5	20.9	23.0	25.0	24.8	27.2	28.0	27.8	33.0	31.4

### For Telecom / Electric Utility Applications



# Standard Range VRLA

**EverExceed**<sup>®</sup>  
power your applications



Length: 165mm Width: 125mm Height: 175mm

Electrical Specifications						
Cells Per Unit	Voltage Per Unit	Weight	Electrolyte	Maximum Discharge Current	Short Circuit Current	Ohms Imped 60 Hz(Ω)
6	12.84	20.9lbs 9.50kg	SG = 1.300	178 Amps	1150 Amps	0.0085

<b>Capacity</b>	35.8 Ah @ 20 hr. rate to 1.75 volts per cell @ 68°F (20°C). 28.0 Ah @ 10 hr. rate to 1.80 volts per cell @ 68°F (20°C).
<b>Applicable Operating Temperature Range</b>	-40°F (-40°C) to +158°F (70°C).
<b>Ideal Operating Temperature Range</b>	+68°F (+20°C) to +82.4°F (28°C).
<b>Floating Charging Voltage</b>	13.5 to 13.8 VDC/unit Average at 68°F~77°F (20°C~25°C).
<b>Recommended Maximum Charging Current Limit</b>	0.25C20 amperes (8.95 amperes @ 100% depth of discharge) @ 20 hr. rate.
<b>Equalization and Cycle Service Charging Voltage</b>	14.4 to 14.8 VDC/unit Average at 68°F~77°F (20°C~25°C).
<b>Maximum AC Ripple (Charger)</b>	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 = 1.79 amperes RMS (C/20).
<b>Self Discharge</b>	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.
<b>Accessories</b>	Inter unit connectors racks and cabinet systems are available.
<b>Terminal: Inserted</b>	Threaded copper alloy insert terminal
<b>Terminal Hardware Initial Torque: Inserted Terminal</b>	9 N-m

Constant Power Discharging Ratings - Watts Per Cell @ 20°C (68°F)										
End Point Volts/Cell	1.5hr	2hr	3hr	4hr	5hr	8hr	10hr	12hr	20hr	24hr
1.85	24.5	19.7	14.6	13.5	10.2	6.80	5.22	6.70	3.22	2.82
1.80	27.6	21.3	15.8	12.6	11.8	8.00	5.80	5.72	3.23	2.66
1.75	34.2	23.2	15.6	13.2	10.2	7.20	6.23	5.41	3.24	2.98

Constant Current Discharging Ratings - Amperes Per Cell @ 20°C (68°F)										
End Point Volts/Cell	1.5hr	2hr	3hr	4hr	5hr	8hr	10hr	12hr	20hr	24hr
1.85	14.2	11.3	7.30	6.25	4.94	2.85	2.73	2.00	1.69	1.23
1.80	14.3	10.5	7.67	6.25	4.96	3.40	2.80	2.33	1.65	1.31
1.75	16.0	11.6	8.53	6.68	5.46	3.56	2.76	2.43	1.79	1.43

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

