



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

# ST-1240

VALVE REGULATED

LEAD ACID BATTERY

FOR TELECOM / ELECTRIC

UTILITY APPLICATIONS

12V 40.0 AH @ 10 HR to 1.80VPC

12V 45.2 AH @ 20 HR to 1.75VPC

# LONG DURATION

# HIGH PERFORMANCE



## Innovative Features

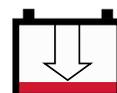
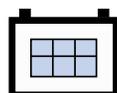
- ◆ Thick positive plate design for maximum service float life 12 years design life @ 20°C(68°F).
- ◆ Valve regulated lead acid battery (VRLA).
- ◆ High-Compression Absorbed Glass Mat technology (AGM) for greater than 99% recombination efficiency.
- ◆ Proprietary Fixed Orifice Plate Pasting technology 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 - 40.0 AMPERE HOUR @ 10 HOUR RATE

AH Capacity to 1.80VPC @ 68°F (20°C)

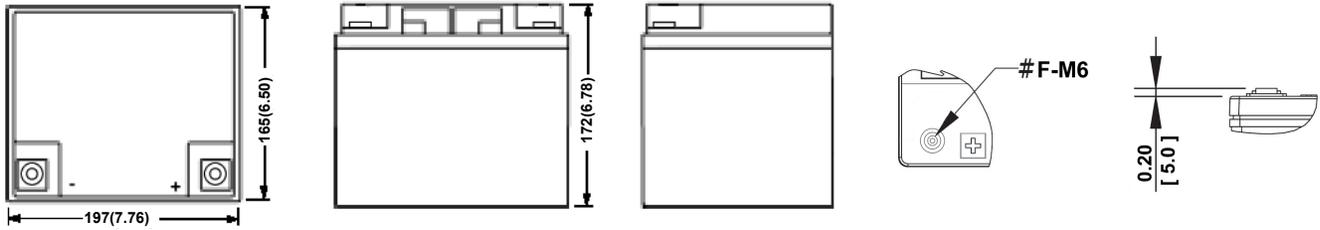
End Point Volts/Cell	60min	1.5hr	2hr	3hr	4hr	5hr	8hr	10hr	12hr	20hr
1.80	26.3	28.6	30.5	31.1	34.3	35.3	38.5	40.0	40.8	44.0

## For Telecom / Electric Utility Applications



# Standard Range VRLA

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



Length: 197mm Width: 165mm Height: 172mm

Electrical Specifications						
Cells Per Unit	Voltage Per Unit	Weight	Electrolyte	Maximum Discharge Current@5s	Short Circuit Current	Internal Resistance (mΩ)
6	12.84	29.0lbs 13.2kg	SG = 1.300	480 Amps	1700 Amps	9.2

<b>Capacity</b>	45.2 Ah @ 20 hr. rate to 1.75 volts per cell @ 68°F (20°C). 40.0 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>	10.0 Amperes ( 0.25C10 Amperes )
<b>Equalization and Cycle Service Charging Voltage</b>	14.1 to 14.4 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 = 0.20 amperes RMS (C/10).
<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	15min	30min	60min	1.5hr	2hr	3hr	4hr	5hr	8hr	10hr	12hr	20hr
1.85	123	80.6	50.9	35.5	29.3	21.4	16.4	13.5	9.02	7.49	6.35	4.25
1.80	125	82.2	51.9	37.4	30.7	22.6	17.2	14.2	9.53	7.93	6.76	4.43
1.75	134	84.4	52.6	39.1	31.5	24.0	17.6	14.7	9.67	8.07	6.88	4.52

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	63.9	43.3	25.8	18.5	14.5	10.1	8.07	6.65	4.53	3.74	3.18	2.06
1.80	65.2	44.2	26.3	19.0	15.3	10.5	8.51	7.06	4.81	4.00	3.40	2.20
1.75	70.1	44.7	26.9	19.9	15.6	10.8	8.73	7.24	4.94	4.11	3.49	2.26

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

