

# Standard Range VRLA

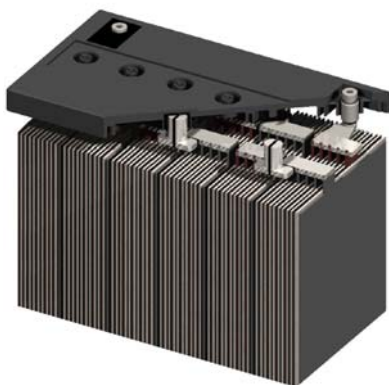
*EverExceed®*  
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*Long Duration and High Performance*


For Telecommunication  
/ Electric Utility Applications



## ST-12160 VALVE REGULATED LEAD ACID BATTERY FOR TELECOM / ELECTRIC UTILITY APPLICATIONS 12V 160 AH @ 10 HR RATE 12V 183 AH @ 20 HR RATE



### FEATURES

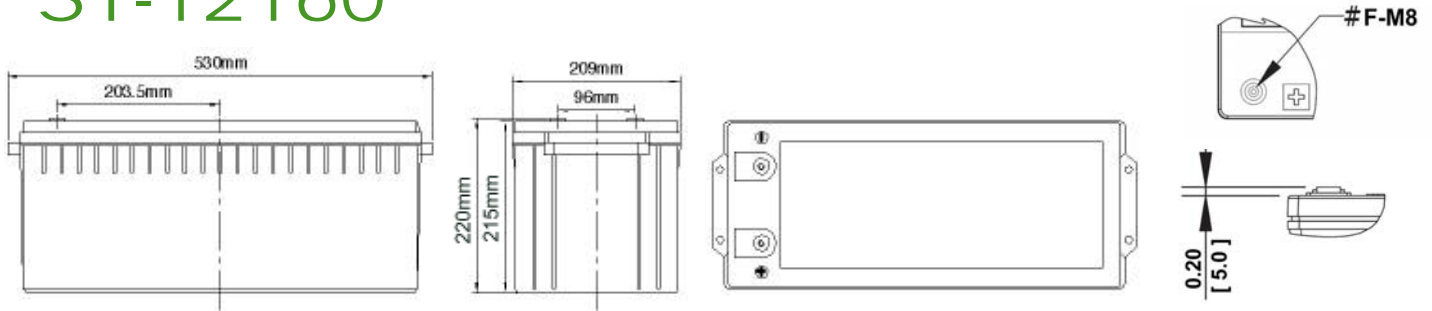
- 📅 Thick positive plate design for maximum service float life - 10 year design life @ 25°C(77°F).
- 📅  UL Recognized component .
- 📅 Valve regulated lead acid battery (VRLA).
- 📅 High-Compression Absorbed Glass Mat technology (AGM) for greater than 99% recombination efficiency.
- 📅 Operates at a low 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.
- 📅 **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%.
- 📅 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.

### 12 VOLTS - 160 AMPERE HOUR @ 10 HOUR RATE

#### AH Capacity to 1.80VPC @ 77°F (25°C)

End Point Volts/Cell	1.5hr	2hr	3hr	4hr	5hr	8hr	10hr	12hr	20hr
1.80	115	122	131	136	141	153	160	163	179

# ST-12160



## ST-12160 – Specifications

Cells Per Unit	Voltage Per Unit	Weight	Electrolyte	CCA at -18°C (0°F)	Short Circuit Current	Ohms Imped 60 Hz (Ω)
6	12.84	115 lbs 52.2 kg	Absorbed H <sub>2</sub> SO <sub>4</sub> SG = 1.300	1080 Amps	4700 Amps	0.0020

<b>Capacity</b>	183 Ah @ 20 hr. rate to 1.75 volts per cell @ 77°F (25°C). 160 Ah @ 10 hr. rate to 1.80 volts per cell @ 25°C (77°F).
<b>Applicable Operating Temperature Range</b>	-40°F (-40°C) to +140°F (60°C).
<b>Ideal Operating Temperature Range</b>	+68°F (+20°C) to +77°F (25°C).
<b>Floating Charging Voltage</b>	13.5 to 13.8 VDC/unit Average at 77°F (25°C).
<b>Recommended Maximum Charging Current Limit</b>	0.25C20 amperes (45.75 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 77°F (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 = 9.15 amperes RMS (C/20).
<b>Self Discharge</b>	EverExceed Standard Range batteries may be stored for up to 6 months at 77°F (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>	11 N-m

## Constant Power Discharge Ratings – Watts Per Cell @ 77°F (25°C)

End Point Volts/Cell	Operating Time to End Point Voltage (in hour)									
	1.5	2	3	4	5	8	10	12	20	24
1.85	138	111	81.0	64.3	53.2	36.5	30.4	25.8	17.2	14.4
1.80	147	118	84.2	66.5	55.3	38.1	31.6	27.1	17.7	15.0
1.75	150	120	86.4	68.1	56.5	38.7	32.3	27.5	18.1	15.3

## Constant Current Discharge Ratings – Amperes @ 77°F (25°C)

End Point Volts/Cell	Operating Time to End Point Voltage (in hour)									
	1.5	2	3	4	5	8	10	12	20	24
1.85	71.6	57.5	41.4	32.5	27.0	18.2	15.0	12.7	8.36	7.06
1.80	76.7	61.0	43.5	34.2	28.2	19.3	16.0	13.6	8.90	7.52
1.75	77.9	62.7	45.0	35.2	29.1	19.9	16.4	14.0	9.14	7.72

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