

# TGI Series Tubular Gel VRLA Batteries

40-1200+AH Tubular Gel 2V & 12V Batteries



SBS introduces a maintenance free (no water top-off) Tubular Gel VRLA battery with the unbeatable combination of tubular plate and gelled electrolyte. This battery works on the gas recombination principle and has been designed to meet the requirements of a wide range of applications.

## Applications

- Telecommunications
- Utility (stations and substations)
- Power
- Oil and Gas
- Solar Photovoltaic Systems
- UPS
- Emergency Lighting
- Railways

## Tubular Gel Features & Benefits

- Design Life: 20 years in float service at 77°F
- Wide operating temperature: -4°F to 131°F
- Cycle life: 1800 cycles at 80% DOD at 77°F  
5200 cycles at 20% DOD at 77°F
- Tubular plates and gelled electrolyte gives very good cycling capability.
- 100% capacity prior to dispatch.
- Maintenance free – no water top-up required throughout service life.
- Gelled electrolyte allows very good heat dissipation.
- No corrosive fumes – special battery room not required.
- Modular steel tray for easy installation.
- Safe to use – leak and explosion proof.
- Cells are tested for leaks by helium leak detection unit.
- Eco-friendly cadmium free alloy for ease of recycling.
- Can be mounted both in horizontal and vertical orientation.
- Low self discharge – less than 2% per month at 77°F.



## Applicable Certifications & Standards

- UL Recognized Components
- IEC/EN 60896-2 certified by CSA (Canadian Standards Ass.)
- ISO 9000 certified quality management system
- ISO 14000 certified environment management system

## Construction

Positive Plate	Tubular plate with lead-calcium-tin alloy spine
Negative Plate	Flat plate with lead-calcium grid alloy
Separator	Microporous synthetic
Electrolyte	Sulfuric acid immobilized as a gel
Container	High impact Polypropylene copolymer
Safety Valve	Self resealing, pressure regulated and explosion proof
Terminals	Epoxy sealed high conductivity lead plated inserts
Intercell Connectors	Lead plated copper connectors
Steel Trays	Acid resistant, epoxy coated stackable boxes
Float Voltage	2.25 +/- 0.01V/cell @ 77°F
Equalize Voltage	2.30 +/- 0.01V/cell @ 77°F

12 Volt Monobloc Technical Data					Performance Data				
Part No.	Nominal Capacity*	No. of Cells Per Battery	Dimensions (in.) Length x Width x Height	Weight (lbs)	Constant Current Discharge In Amperes To 1.75v/cell				
					1h	3h	5h	8h	24h
12 TGI 40	40	6	16.2L x 6.86W x 8.71H	60	22.9	10.6	6.90	4.80	2.13
12 TGI 60	60	6	16.2L x 6.86W x 8.71H	73	34.3	16.0	10.3	7.20	3.19
12 TGI 80	80	6	20.8L x 8.71W x 8.90H	106	45.7	21.3	13.8	9.70	4.25
12 TGI 100	100	6	20.8L x 8.71W x 8.90H	119	57.1	26.6	17.2	12.1	5.32

2 Volt Cell Module System Technical Data					Performance Data				
Part No.	Nominal Capacity*	No. of Cells Per Module	Module Dimensions (in.) Length x Depth x Height	Module Weight (lbs)	1h	3h	5h	8h	24h
					2 TGI 120	120	8	25.0L x 17.6D x 8.39H	212
2 TGI 160	160	8	34.8L x 17.6D x 8.47H	297	91.4	42.6	27.5	19.3	8.51
2 TGI 200	200	6	31.6L x 17.6D x 8.47H	262	114	53.2	34.4	24.2	10.6
2 TGI 240	240	6	34.3L x 17.6D x 8.47H	293	137	63.8	41.4	29.0	12.8
2 TGI 280	280	4	26.1L x 17.6D x 8.47H	227	160	74.5	48.3	33.8	14.9
2 TGI 300	300	4	31.1L x 17.6D x 8.47H	264	171	79.8	51.7	36.2	16.0
2 TGI 320	320	4	31.1L x 17.6D x 8.47H	271	183	85.1	55.2	38.6	17.0
2 TGI 360	360	4	35.2L x 16.8D x 8.39H	306	206	95.7	62.1	43.5	19.1
2 TGI 400	400	4	35.2L x 16.8D x 8.39H	322	229	106	69.0	48.3	21.3
2 TGI 440	440	3	30.8L x 17.6D x 8.47H	267	251	117	75.9	53.1	23.4
2 TGI 480	480	3	32.5L x 17.6D x 8.47H	284	273	127	82.7	57.9	25.5
2 TGI 500	500	3	32.5L x 17.6D x 8.47H	286	286	133	86.1	60.4	26.6
2 TGI 600	600	3	25.7L x 27.8D x 8.47H	429	343	160	103	72.5	31.9
2 TGI 675	675	3	25.7L x 27.8D x 8.47H	449	386	180	116	81.5	35.9
2 TGI 750	750	3	29.5L x 27.8D x 8.47H	473	429	200	129	90.6	39.9
2 TGI 825	825	3	29.5L x 27.8D x 8.47H	493	471	219	142	99.6	43.9
2 TGI 900	900	3	35.8L x 27.8D x 8.31H	515	514	239	155	109	47.9
2 TGI 975	975	3	35.8L x 27.8D x 8.31H	542	557	259	168	118	51.8
2 TGI 1050	1050	3	35.8L x 27.8D x 8.31H	568	600	279	181	127	55.8
2 TGI 1125	1125	3	41.1L x 27.8D x 8.47H	652	643	299	194	136	59.8
2 TGI 1200	1200	3	41.1L x 27.8D x 8.47H	682	686	319	207	145	63.8

\*Nominal capacity is at a discharge rate of 10 hours to an end voltage of 1.80 at 77°F.  
 Higher AH systems available in parallel system configurations.  
 Other special designs & configurations of the battery systems for specific application shall be provided on request.  
 SBS reserves the right to change specifications and designs without notice.  
 Illustrations, data, dimensions and weights given in this brochure are for guidance only and cannot be held binding on the company.