USG12-60(12V60AH)

Applications

- *Telecom application (indoor or outdoor BTS)*
- *Solar System*
- *Wind system*
- *Hybrid solution*

Design

- *Positive plate: flat plate and grid-plate in PbCaSn-alloy*
- *Negative plate: flat plate and grid-plate in PbCaSn-alloy with long life expander material*
- *Electrolyte: sulphuric acid with a density of 1.29 kg/l(25 °C), fixed as GEL by fumed silica*
- *Separator: high quality microporous separator*
- *Safety valve: valve with flame arrestor*

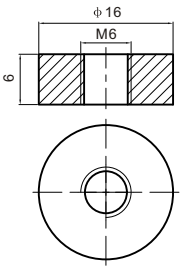
Features

- *Long life: 12 years design life*
- *Good deep discharge resilience performance*
- *Special plate design, long cycle lifetime*
- *High thermal capacity, reduce the risk of thermal out of control and drying hard, can be used in bad enviroment*
- *Flame retardant container UL94-V0*

Terminal

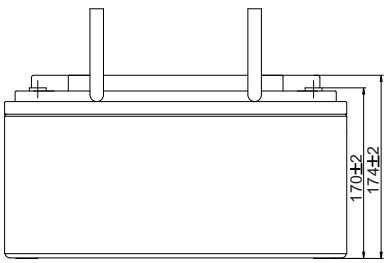
Terminal Model: T6

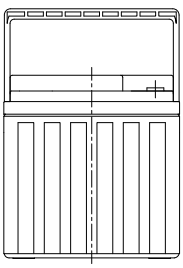
Unit: mm

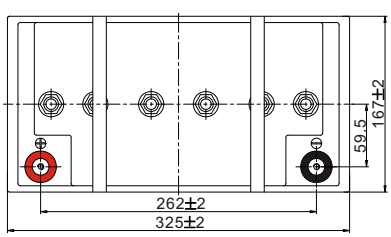


Layout

Unit: mm







UPLUS
NEW TECHNOLOGY BATTERY

■ Telecom Battery
□ UPS Battery
■ Renewable Energy Battery

General Purpose GEL Battery-USG Series

Specification

Nominal Voltage	12V	
Rated Capacity (Ah)	60.0 AH/6.00A	(10hr,1.80V/cell,25°C)
	45.9 AH/15.3A	(3hr,1.75V/cell,25°C)
	38.4 AH/38.4A	(1hr,1.60V/cell,25°C)
Dimension	Length	325.0±2mm
	Width	167 ±2mm
	Container Height	174.0±2mm
	Total Height	174.0±2mm
Approx.Weight	Approx 24.0 kg	
Terminal	T6	
Container Material	ABS	
Max. Discharge Current	600A (5s)	
Internal Resistance	Approx 8.7mΩ	
Operating Temp. Range	Discharge: -20～55°C Charge: 0～40°C Storage: -20～50°C	
Capacity Affected by Temperature	40°C	103%
	25°C	100%
	0°C	86%
Cycle Use	Initial Charging Current less than 15.0A. Voltage: 14.4V at 25°C	Temp. coefficient -30mV/°C
Standby Use	Equalization voltage: 14.1V at 25°C	Temp. coefficient -18mV/°C
	Float voltage:13.5V at 25°C	Temp. coefficient -18mV/°C
Self Discharge	USG series batteries may be stored for up to 9 months at 25°C and then a freshening charge is required. For higher temperatures the time interval will be shorter.	

ISO9001 ISO14001

Performance

Constant Current Discharge (Amperes) at 25 °C (77°F)

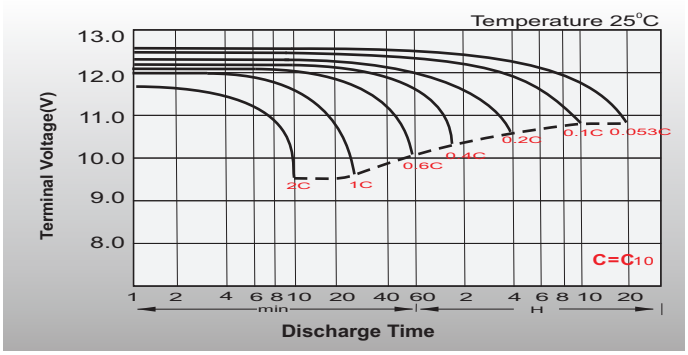
F.V/Time	20min	30min	45min	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	20h
1.85V/cell	55.6	43.7	33.3	27.9	17.7	13.5	11.2	9.64	8.32	7.37	6.64	6.07	5.74	3.16
1.80V/cell	63.7	48.8	36.7	30.8	19.1	14.4	11.8	10.13	8.74	7.72	6.96	6.39	6.00	3.29
1.75V/cell	71.6	53.7	39.7	33.0	20.3	15.3	12.4	10.52	9.04	7.99	7.19	6.58	6.12	3.35
1.70V/cell	77.2	57.5	42.2	34.9	21.5	15.9	12.8	10.85	9.36	8.25	7.40	6.75	6.26	3.40
1.67V/cell	80.3	59.7	43.7	36.2	22.1	16.4	13.1	11.08	9.52	8.37	7.52	6.84	6.33	3.43
1.60V/cell	87.0	63.9	46.9	38.4	23.0	17.1	13.6	11.42	9.75	8.55	7.65	6.99	6.46	3.48

Constant Power Discharge (Watts/cell) at 25 °C (77°F)

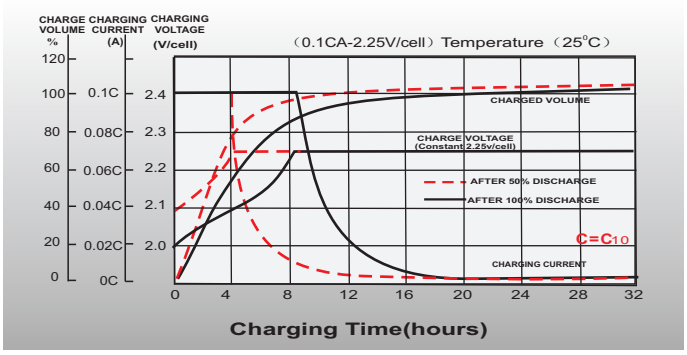
F.V/Time	20min	30min	45min	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	20h
1.85V/cell	106.3	84.0	64.5	54.2	34.5	26.4	21.9	19.0	16.5	14.6	13.2	12.1	11.4	6.29
1.80V/cell	120.2	93.0	70.6	59.5	37.2	28.2	23.1	19.9	17.2	15.2	13.8	12.7	11.9	6.54
1.75V/cell	133.5	101.3	75.8	63.4	39.3	29.7	24.2	20.6	17.8	15.7	14.2	13.0	12.1	6.67
1.70V/cell	142.3	107.6	79.9	66.7	41.4	30.8	24.9	21.2	18.4	16.2	14.6	13.4	12.4	6.74
1.67V/cell	146.4	110.6	82.1	68.8	42.3	31.7	25.4	21.6	18.6	16.4	14.8	13.5	12.5	6.80
1.60V/cell	156.9	117.3	87.6	72.7	43.8	32.8	26.3	22.2	19.0	16.7	15.0	13.8	12.8	6.89

Characteristic Curve

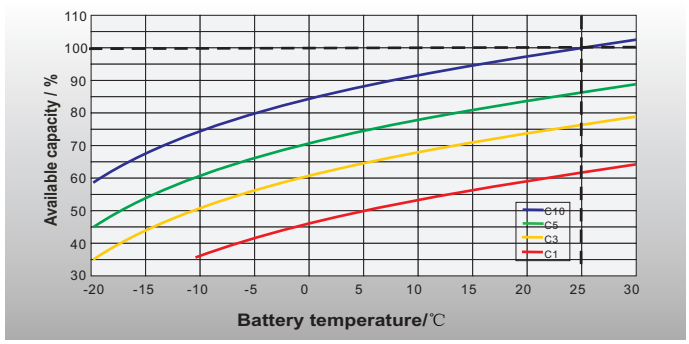
Discharge Characteristics



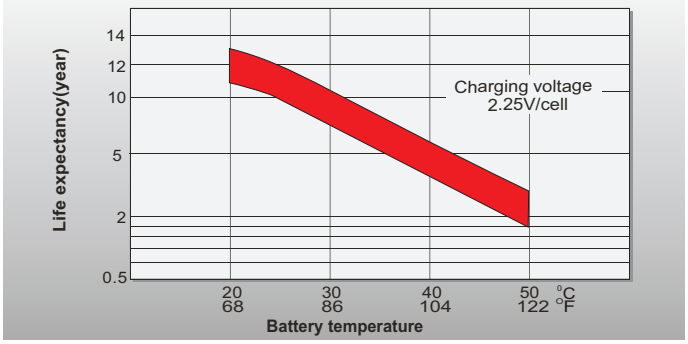
Float Charging Characteristics



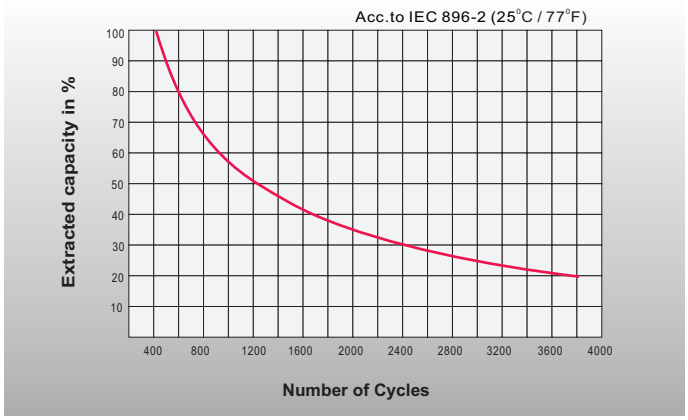
Temperature Effects in Relation to Battery Capacity



Effect of Temperature on Long Term Float Life



Cycle Life in Relation to Depth of Discharge



General Relation of Capacity VS. Storage Time