BGGP121000M8 TOP TERMINAL GEL

PRODUCT CHARACTERISTICS:

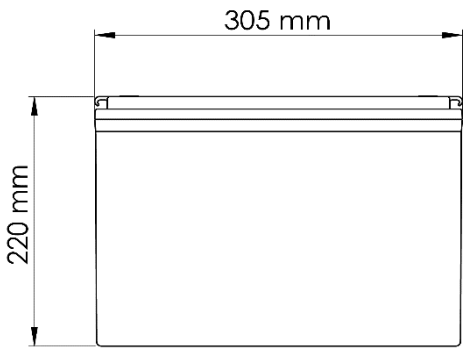
- Valve-regulated GEL battery
- UPS and reserve power applications
- EUROBAT design life definition: Long Life 10 - 12 years
- Extremely long float life performance
- Superior cycling endurance
- Compact design with high energy density
- ETSI Rack integration
- Low installation cost, maintenance free product
- Sealed for leak-proof operation
- Delivered ready for use
- Non-hazardous cargo for ground, sea and air transport
- Fully recyclable product

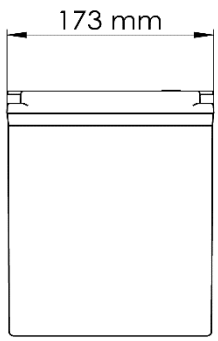
TECHNICAL SPECIFICATIONS:

Electrical specifications:	
Nominal voltage:	12V
Number of cells:	6
Rated capacity:	100 Ah (20 h rate to 1.75 Vpc at 25 °C)
Internal resistance:	5 mOhm (IEC 60 896 -21/22)
Short circuit current:	2 550 A (IEC 60 896 -21/22)
Float charge voltage:	2.27 V per cell (Vpc) at 25 °C
Design features:	
Design life at 20 °C:	Long Life 10 - 12 years
Plates:	Tick Flat Pasted
Active material:	Very high purity virgin lead
Grid alloy:	Lead-Calcium-Tin alloy
Electrolyte:	Sulphuric acid, Analytical grade
Separator:	GEL
Operating temperature:	-10 °C to +50 °C
	+15 °C to +25 °C (recommended)
Venting valve:	Rubber, one way, self resealing
	Opening pressure: 1.7 PSI
	Resealing pressure: 1.5 PSI
Internal gas recombination efficiency:	more than 99%
Flame arrestor:	Available
Storage temperatures:	-10 °C to +40 °C
Self discharge:	Less than 2.0% per month at 20°C
Storability without recharging:	Up to 6 months at 20°C
Shelf life:	Up to 1 year
Container / lid material:	Shock resistant ABS FR; flammability class UL94 V0
Terminal position:	Top
Terminal sealing:	Mechanical + epoxy double sealing
Terminal type:	Brass; Female; M6 thread
Terminal torque:	6 Nm
Transport terminal cover:	Available
Carrying Handles:	Available
Connectors and bolts:	Supplied as standard
Applicable standards and recommendations:	
IEC 60896 - 21/22; EN 50272 - 2; IEC 61427 – 1/2; IEC 61056 - 1; BS 6290 - 4 IEEE 1184; IEEE 1187; IEEE 1188	
Manufacture standards:	
ISO 9001; ISO 14001; OHSAS 18001; AQAP 2110	

PHYSICAL CHARACTERISTICS:

	SI Units	US Units
Length	305 mm	12 inches
Width	173 mm	6.8 inches
Height	220 mm	8.7 inches
Weight	32 kg	70.6 lbs





PERFORMANCE CHARACTERISTICS
DISCHARGE PERFORMANCE AT CONSTANT CURRENT DI SCHARGE (A) FOR BATTERY AT 25° C

Uf, Vpc	5 min	10 min	15 min	30 min	1 h	2h	3 h	4 h	5 h	6 h	8 h	20 h
1.6	235.6	167.5	133.9	95.8	58.4	34.0	24.9	19.9	16.7	14.4	11.6	5.4
1.65	231.7	166.4	133.5	95.4	58.1	33.9	24.8	19.8	16.6	14.3	11.5	5.3
1.7	227.8	165.8	132.8	94.9	57.8	33.7	24.7	19.7	16.5	14.2	11.4	5.2
1.75	225.5	164.2	131.7	93.9	57.3	33.3	24.4	19.5	16.3	14.1	11.3	5.1
1.8	223.3	162.5	130.2	93.0	56.7	33.0	24.2	19.3	16.2	14.0	11.2	5.0
1.85	220.2	160.3	128.4	91.8	56.0	32.6	23.8	19.0	16.0	13.8	11.0	4.9

DISCHARGE PERFORMANCE AT CONSTANT POWER DISCHARGE W (PER CELL) FOR BATTERY AT 25° C

Uf, Vpc	5 min	10 min	15 min	30 min	1 h	2h	3 h	4 h	5 h	6 h	8 h	20 h
1.6	471.0	333.7	267.8	191.6	116.8	68.0	49.8	39.8	33.3	28.7	23.0	10.2
1.65	457.6	331.5	267.1	190.8	116.3	67.7	49.6	39.6	33.2	28.6	22.9	10.2
1.7	454.2	330.2	265.6	189.7	115.7	67.3	49.1	39.4	33.0	28.5	22.8	10.1
1.75	450.9	327.0	263.4	187.9	114.6	66.7	48.6	39.0	32.7	28.2	22.5	10.0
1.8	446.4	323.6	260.4	186.0	113.5	66.0	48.4	38.6	32.4	27.9	22.3	9.8
1.85	435.2	315.8	253.7	181.5	110.7	64.4	47.1	37.7	31.5	27.2	21.8	9.7

DISCHARGE PERFORMANCE AT CONSTANT POWER DISCHARGE W (PER BLOCK) FOR BATTERY AT 25°C

Uf, Vpc	5 min	10 min	15 min	30 min	1 h	2h	3 h	4 h	5 h	6 h	8 h	20 h
1.6	2825.7	2002.1	1607.0	1149.5	700.8	407.9	298.8	238.6	200.0	172.4	137.9	61.5
1.65	2745.4	1988.7	1602.6	1145.0	697.5	406.2	297.6	237.5	199.1	171.6	137.3	61.2
1.7	2725.3	1980.9	1593.6	1138.3	694.2	404.0	294.6	236.4	198.0	170.7	136.6	60.9
1.75	2705.2	1961.9	1580.3	1127.2	687.5	400.1	291.6	233.8	196.2	169.1	134.7	60.3
1.8	2678.4	1941.8	1562.4	1116.0	680.8	396.2	290.2	231.6	194.2	167.4	133.9	59.7
1.85	2611.4	1895.0	1522.2	1089.2	664.0	386.1	282.7	226.0	189.3	163.3	130.6	58.2

TEMPERATURE CORRECTION FACTOR OF CAPACITY AT CONSTANT CURRENT DISCHARGE

Discharge time	-10 °C	0 °C	10 °C	15 °C	20 °C	25 °C	30 °C	35 °C	40 °C	50 °C
From 5 to 59 minutes	0.70	0.80	0.90	0.95	0.97	1.00	1.05	1.10	1.13	1.15
From 1 to 20 hours	0.82	0.88	0.94	0.97	0.98	1.00	1.03	1.05	1.07	1.08

BATTERY CHARGE CONDITIONS AT 25° CONSTANT VOLTAGE AND LIMITED CURRENT (IU)

Charge current limit	Float charge voltage	Equalization charge voltage	Boost charge voltage
0.1 – 0.25C10 A Recommended: 0.20C10 A	2.27 V per cell at 25 ˚C; Temperature correction: -3 mV / cell / oC	2.32 V per cell at 25 ˚C Recommended: every 3 months for 24h during long time float operation	2.40 V per cell at 25˚C Temperature correction: -4 mV / cell / oC
Float application: 0.20C10 A / 2.27 V per cell at 25 ˚C		Cycling applications: 0.20C10 A / 2.40 V per cell at 25 ˚C; Recharge Ah input at least 105% from previous discharge Ah