

SBL410-12HR V0 Xtreme (12V90Ah)

Applications (for industrial standby use)

- Uninterruptable Power Supply (UPS)
- Electric Power System (EPS)
- Emergency backup power supply
- Emergency light
- Railway signal
- Alarm and security system
- Communication power supply
- DC power supply



Certificates

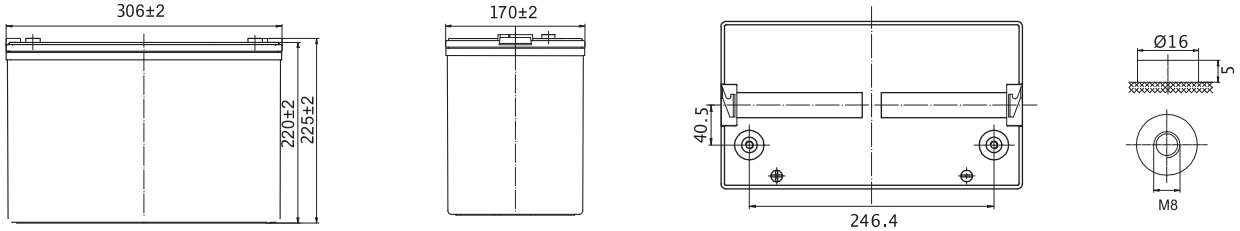
MH46465 Conform to IEC60896-21&22

Specifications

Nominal Voltage	12V	
Nominal Capacity	90Ah (C_{10},1.8V/cell)	
Approx. Weight	30.5kg	
Terminal	M8	
Container Material	ABS UL94 V0	
Rated Capacity (20°C)	90Ah/9.0A, 10hr, 10.8V	
	77.05Ah/15.41A, 5hr, 10.5V	
	70.65Ah/23.55A, 3hr, 10.5V	
	71.2Ah/71.2A, 1hr, 9.6V	
Max. Discharge Current	950A (5s)	
Internal Resistance / Impedance (1kHz)	Approx. 4.4mΩ	
Nominal Oper. Temp. R.	20±2°C	
Operating Temp. Range	Discharge:	-20~60°C
	Charge:	-10~45°C
	Storage:	-20~40°C
Float Charge	2.285V/cell ± 0,5 % @ 20°C	
	Charging Current: 0.1-0.2C	
	Temperature coefficient: -3mV/cell/°C	
Capacity affected by Temp.	30°C	103%
	20°C	100%
	0°C	89%
Self Discharge	SSB batteries may be stored for up to 6 months at 20°C and then a freshening charge is required. For higher temperatures the time interval will be shorter.	
Life Expectancy	>12 years according to EUROBAT	

Dimensions

- **M8 Terminal**
  Unit: mm | Dimensions: 306±2 Length X 170±2 Width X 220±2 Height (225±2 Height incl. Terminal)



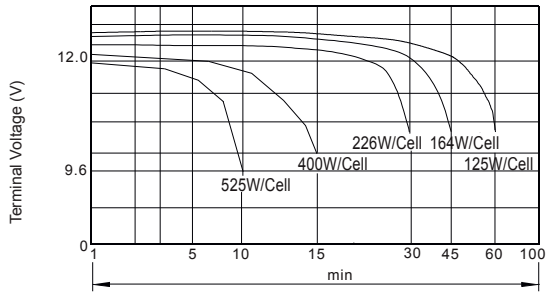
Constant Current Discharge (Amperes) at 20°C

End Voltage	3min	5min	10min	15min	20min	25min	30min	45min	60min	90min	3h	5h	8h	10h
1.60V/cell	446	376	286	215	182	161	145	100	71.2	47.04	25.38	16.43	10.99	9.36
1.65V/cell	441	366	270	211	180	158	139	99.5	68.7	45.72	24.66	16.09	10.76	9.27
1.67V/cell	439	362	264	210	179	156	137	99.3	67.7	45.24	24.48	15.88	10.63	9.27
1.70V/cell	425	352	251	200	171	148	129	86.1	65.1	44.70	24.21	15.71	10.51	9.18
1.75V/cell	408	339	245	194	167	144	125	84.0	63.2	43.68	23.55	15.41	10.32	9.09
1.80V/cell	397	318	236	188	156	137	120	82.6	60.5	42.54	22.89	15.03	10.08	9.00

Constant Power Discharge (Watts/cell) at 20°C

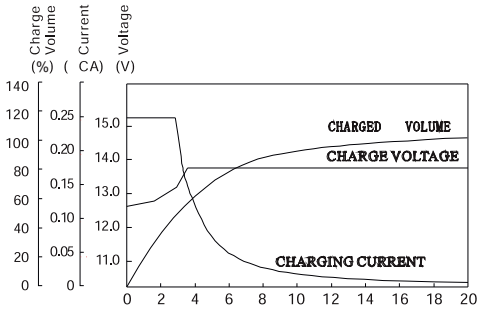
End Point	3min	5min	10min	15min	20min	25min	30min	45min	60min	90min	3h	5h	8h	10h
1.60V/cell	874	719	525	412	349	300	259	187	141	85.97	50.51	32.52	21.50	17.81
1.65V/cell	860	686	505	403	336	289	249	182	138	83.68	49.30	31.86	21.04	17.46
1.67V/cell	854	672	497	400	331	284	245	181	137	82.52	48.62	31.51	20.82	17.28
1.70V/cell	821	642	487	390	321	274	235	170	132	81.40	47.95	31.17	20.61	17.11
1.75V/cell	764	607	457	358	311	264	226	164	125	79.11	46.75	30.51	20.17	16.73
1.80V/cell	708	567	427	344	296	258	221	159	121	76.95	45.40	29.70	19.71	16.38

Discharge Characteristics



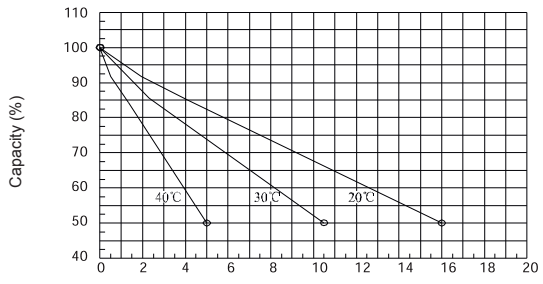
Discharge Time

Float Charging Characteristics



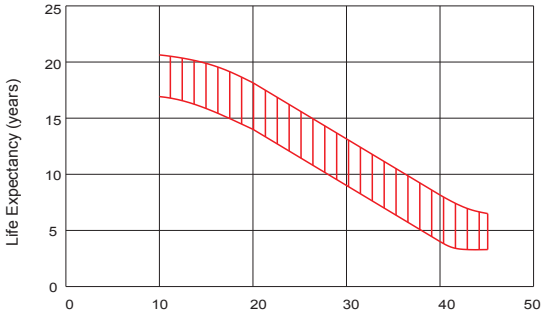
Charging Time (hours)

Self-Discharge Characteristic



Storage Time (months)

Effect of Temperature on Long Term Float Life



Battery Temperature