



SMARTRONICS

MH61491

12-65H

12V 65Ah

Valve Regulated Lead Acid Battery / AGM Technology

Specifications

Nominal Voltage(V) 12V

Nominal Capacity

20 hr rate	(3.25A to 1.75V/cell,25°C (77°F))	65AH
10 hr rate	(6.175A to 1.75V/cell,25°C (77°F))	61.75AH
5 hr rate	(11.05A to 1.70V/cell,25°C (77°F))	55.25AH
3C	(195A to 1.60V/cell,25°C (77°F))	26AH
1C	(65A to 1.60V/cell,25°C (77°F))	41.17AH

Weight Approx. 20.9 kg (45.98lbs)

Internal Resistance Approx. 7mΩ

Maximum Discharge Current 780A (5sec)

Charging Methods at 25°C (77°F)

Cycle use:

Initial Charging Current less than	19.5A
Charging Voltage	14.4V~15.0
Coefficient	-30mV/°C

Standby use:

No limit on Initial Charging Current Voltage	
Charging Voltage	13.5V~13.8V
Coefficient -20.0mV/°C	-20mV/°C

Operating Temperature Range

Charge	-15~40°C (5~104°F)
Discharge	-15~50°C (5~122°F)
Storage	-15~40°C (5~104°F)
Case Material	ABS UL94 HB
Terminal	F8

Description of torque value of hard ware for the terminals

Recommended torque value	M6: 7 N-m (71kgf-cm)
Maximum allowable torque value	M6: 9 N-m (92kgf-cm)

Self-Discharge

This series batteries may be stored for up to 6 months at 25°C (77°F) and then a freshening charge is required. For higher temperatures the time interval will be shorter.



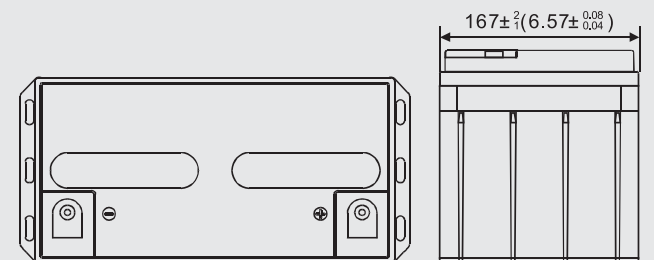
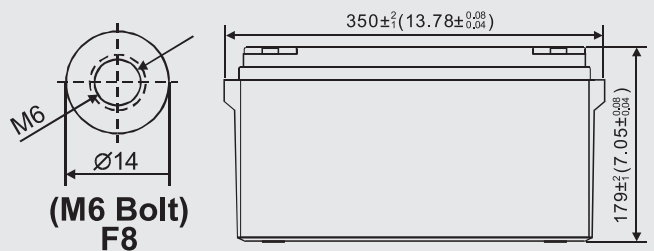
P# 12-65H 207

*H: High performance series

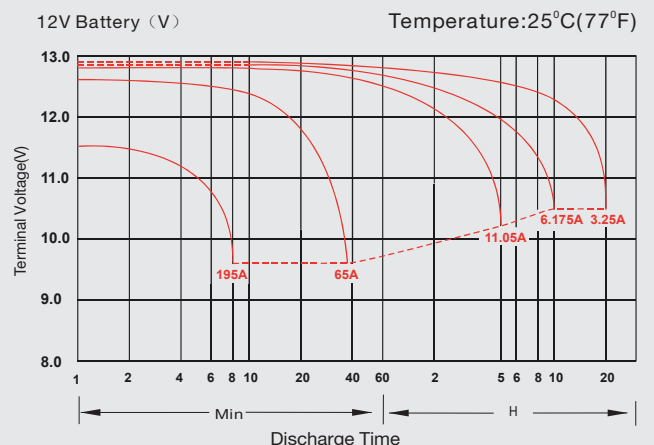
For: Backup Power i.e. UPS, ...

Design life: 6-9 years (Ambient Temperature 20°C)

Dimensions



Discharge Characteristics



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

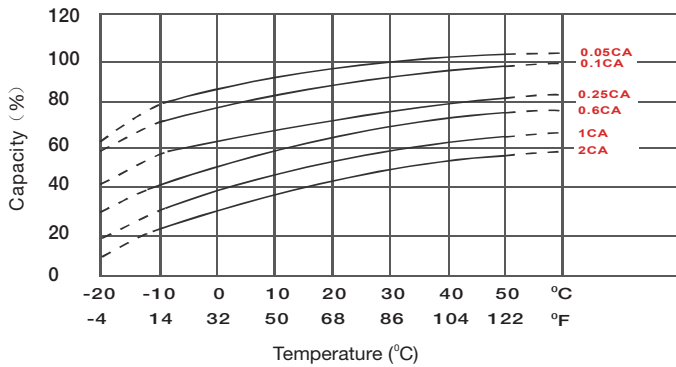
F.V (V/cell)	Time	5min	10min	15min	30min	60min	2h	3h	4h	5h	10h	20h
1.85		137	102	91.0	50.7	36.6	23.1	16.2	13.0	10.8	6.19	3.24
1.80		151	123	100	63.6	38.5	24.3	17.2	13.6	11.3	6.43	3.35
1.75		177	135	109	68.5	41.5	24.8	17.3	13.8	11.5	6.54	3.40
1.70		208	149	116	71.5	42.5	25.0	17.5	13.9	11.6	6.58	3.41
1.65		224	158	122	74.7	43.6	25.5	17.8	14.1	11.8	6.61	3.43
1.60		245	169	129	77.2	44.2	25.8	18.0	14.2	11.9	6.63	3.44

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

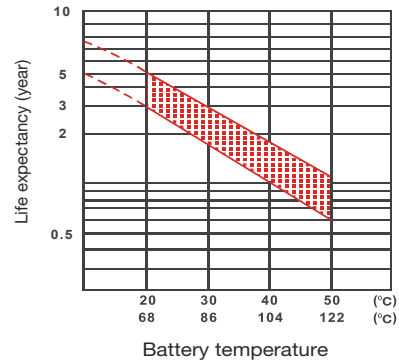
F.V (V/cell)	Time	5min	10min	15min	30min	60min	2h	3h	4h	5h	10h	20h
1.85		249	203	170	113	72.5	45.7	32.4	26.0	21.7	12.5	6.54
1.80		275	230	190	124	76.5	48.0	33.5	27.2	22.6	12.9	6.76
1.75		320	251	207	134	82.3	49.0	34.0	27.5	23.1	13.2	6.86
1.70		371	274	215	138	83.7	49.5	34.3	27.7	23.2	13.2	6.87
1.65		396	290	224	143	84.3	49.8	34.7	28.0	23.4	13.3	6.91
1.60		432	309	231	148	85.0	50.0	35.0	28.2	23.4	13.3	6.94

Specifications subject to change without notice.

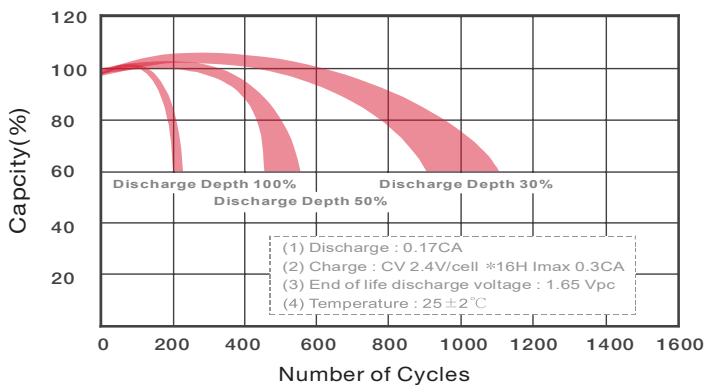
Temperature Effects in Relation to Battery Capacity



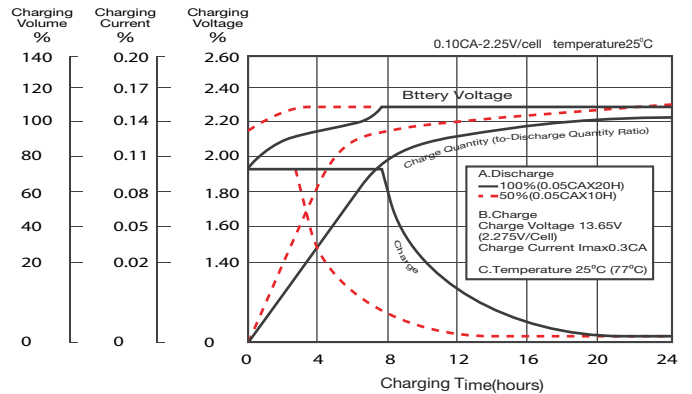
Effect of Temperature on Long Term Float Life



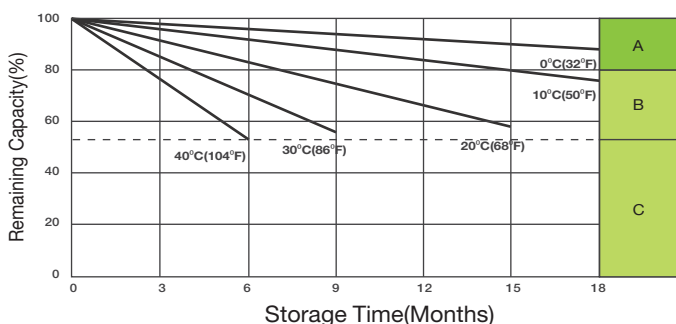
Cycle Life in Relation to Depth of Discharge



Float Charging Characteristics



Self Discharge Characteristics



- A** No supplementary charge required (Carry out supplementary charge before use if 100% capacity is required.)
- B** Supplementary charge required before use. Optional charging way as below:
 1. Charged for above 3 days at limited current 0.25CA and constant voltage 2.25V/cell.
 2. Charged for above 20hours at limited current 0.25CA and constant voltage 2.45V/cell.
 3. Charged for 8~10hours at limited current 0.05CA.
- C** Supplementary charge may often fail to recover the capacity. The battery should never be left standing till this is reached.