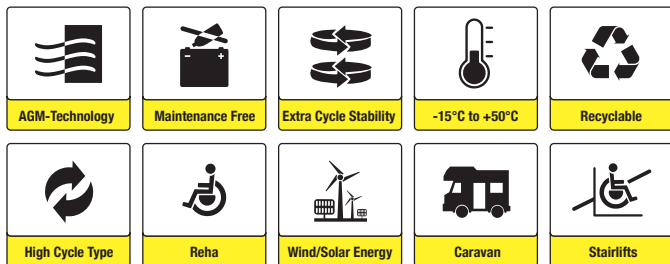




⊕⊖ **sunbattery**®

HC12-80 M6 (12V80Ah)



Applications

- Electric tools
- Vehicle in place of walking
- Lawn mowers
- Golf trolleys
- Portable apparatus, lights and instruments
- Electric toys
- Portable power
- Wheelchairs
- Medical equipments
- Wind/Solar energy
- Electric boats
- Caravan

Certificates



Conform to
IEC60896-21&22

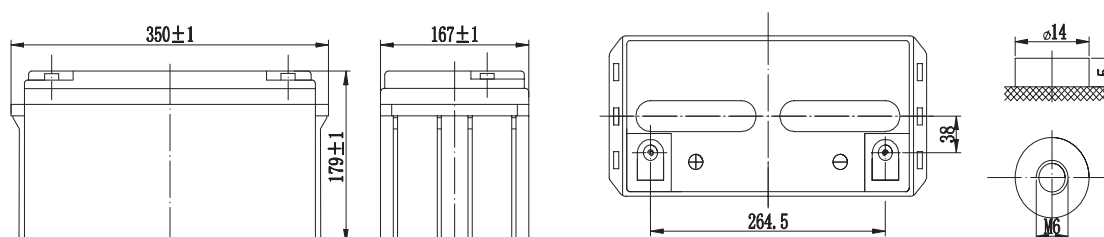
Specifications

Nominal Voltage	12V	Nominal Oper. Temp. R.	25±3°C
Nominal Capacity	82Ah (C ₂₀ , 1.80V/cell)	Cycle Use	Initial Charging Current less than 24.0A. Voltage 14.55V ±1% at 25°C. Temperature Coefficient -30mV/°C.
Approx. Weight	23.5kg	Standby Use	Initial Charging Current less than 24.0A. Voltage 13.65V ±1% at 25°C Temp. Coefficient -20mV/°C
Terminal	M6	Capacity affected by Temp.	40°C 103% 25°C 100% 0°C 86%
Container Material	ABS UL94 HB	Self Discharge	HC batteries may be stored for up to 6 months at 25°C and then a freshening charge is required. For higher temperatures the time interval will be shorter.
Rated Capacity (25°C)	82.0Ah/4.1A, 20hr, 1.80V/cell 80.0Ah/8.0A, 10hr, 1.80V/cell 71Ah/14.2A, 5hr, 1.75V/cell 63.3Ah/21.1A, 3hr, 1.60V/cell 50.8Ah/50.8A, 1hr, 1.60V/cell	Cycle Life	Approx. 650 Cycles at 50% DOD
Max. Discharge Current	750A (5s)		
Internal Resistance	Approx. 5.5mΩ		
Operating Temp. Range	Discharge: -15~50°C Charge: 0-40°C Storage: -15~40°C		

Dimensions

■ M6 Terminal

Unit: mm | Dimensions: 350 Length X 167 Width X 179 Height (179 Height incl. Terminal)





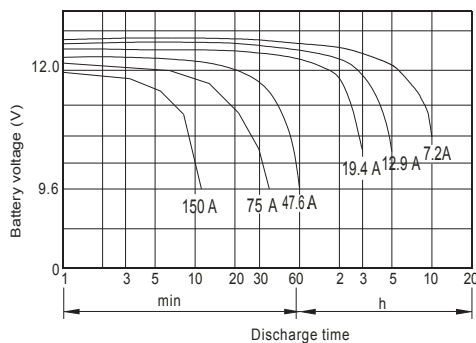
Constant Current Discharge (Amperes) at 25°C

End Point	5min	10min	15min	30min	1h	3h	5h	10h	20h
1.60V/cell	259	195	149	89.3	50.8	21.1	14.67	8.31	4.43
1.65V/cell	251	185	143	87.6	49.9	21.0	14.5	8.23	4.35
1.70V/cell	237	174	138	85.4	49.3	20.9	14.3	8.15	4.27
1.75V/cell	220	165	131	83.7	48.6	20.5	14.2	8.07	4.18
1.80V/cell	200	155	123	81.2	47.8	20.1	14.0	8.0	4.1

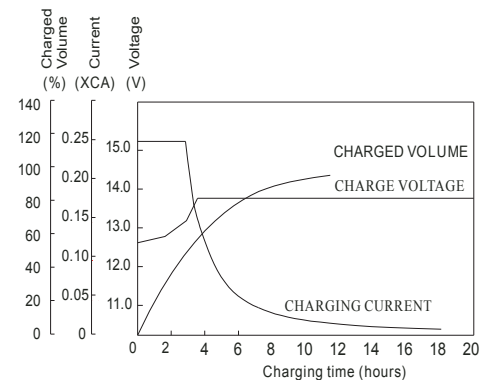
Constant Power Discharge (Watts/cell) at 25°C

End Point	5min	10min	15min	30min	1h	3h	5h	10h	20h
1.60V/cell	443	330	280	158	104	41	27.3	16.58	9.27
1.65V/cell	420	318	266	156	102	38.5	26.9	16.5	9.15
1.70V/cell	398	306	252	153	99.5	37	26.5	16.42	9.04
1.75V/cell	376	293	236	151	97.5	36.5	26	16.18	8.81
1.80V/cell	356	282	221	147	95.5	35.5	25.3	15.52	8.37

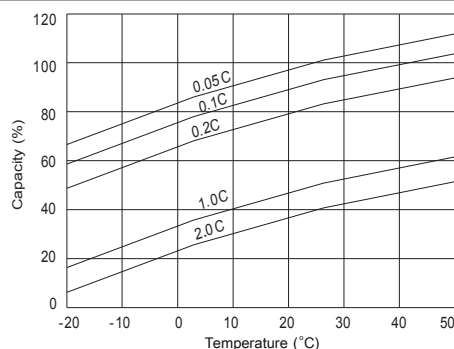
Discharge Characteristics



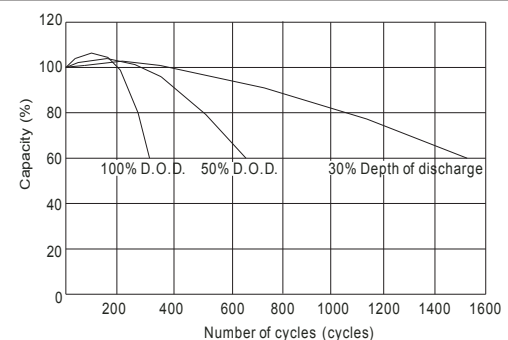
Float Charging Characteristics



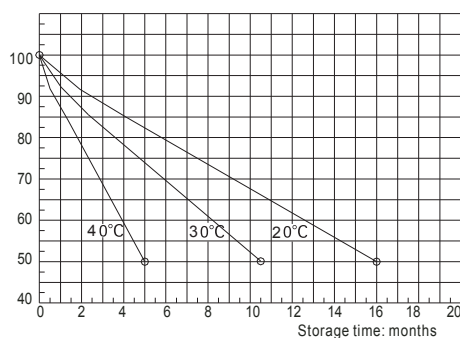
Temperature Effects in Relation to Battery Capacity



Cycle Service Life in Relation to Depth of Discharge



Self Discharge Characteristics



Temperature Effects on Float Life

