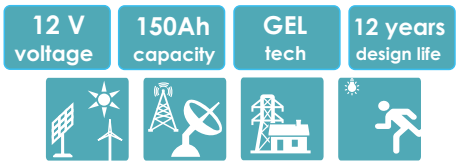
VHR 12V 150AH (12V150Ah)

Superior Cycle Gel Battery

SCG series is Superior Cycle VRLA Gel battery. By combining the newly developed nano gel electrolyte and high cyclic paste, SCG series delivers high cycle life, excellent high&low temperature performance, it is highly suited for renewable energy systems, outdoor telecom and other harsh environment require high cycle applications.

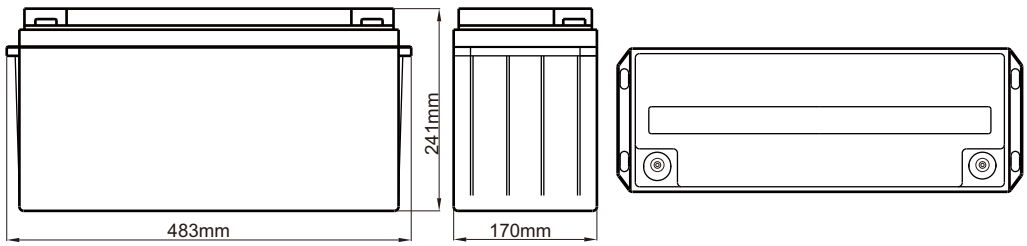


Nominal Voltage (V)	12 (6 cells per unit)
Designed Floating Life (25℃)	12 Years
Nominal Capacity (25℃)	150 Ah @ 10HR-rate (to 1.80Vpc)
Dimension (mm)	L483mm x W170mm x H241mm
Approx. Weight	42 kg (92.6 lbs)
Terminal Type	F-M8 or cable (torque:10~12N.m for F-M8)
Internal Resistance	< 0.0035 Ohm (fully charged @ 20°C)
Max. Charge Current	37.5A
Max. Discharge Current (5S)	1200 A
Short Circuit Current	3400 A
Self Discharge	Approx. 2.5% per month @ 20°C
Ambient Temperature	Discharge: -40~60°C Charge: -20~55°C Storage: -25~45°C
Float Charge Voltage	13.5-13.62V/block @25℃ (-3mV/ cell/℃)
Equalize and cycle Use Charge Voltage	14.1-14.4V/block @25℃
Container Material	ABS (UL94-V0 optional)

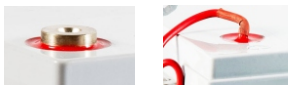
Complied standards

- IEC 60896-21/22
- GB/T19638
- IEC61427
- JIS C8704
- BS6290 part 4

BATTERY DIMENSIONS



TERMINAL(optional)



BATTERY DISCHARGE TABLE

Constant Current Discharge Characteristics: Amps (25°C)									
F.V/Time	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.70V	155	96.4	57.1	41.5	33.1	27.6	18.8	15.5	8.18
1.75V	150	94.5	56.1	40.9	32.7	27.3	18.5	15.3	8.03
1.80V	143	91.4	54.9	40.1	32.0	26.6	18.1	15.0	7.87
1.85V	135	87.4	52.8	38.8	31.1	26.0	17.7	14.6	7.69

Constant Power Discharge Characteristics: W/cell (25°C)									
F.V/Time	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.70V	291	182	109	79.4	63.6	53.3	36.6	30.4	16.1
1.75V	283	180	108	78.8	63.4	53.1	36.4	30.2	15.9
1.80V	273	175	106	78.0	62.5	52.2	35.8	29.8	15.7
1.85V	260	170	103	76.1	61.2	51.4	35.3	29.2	15.5

PARAMETERS FOR SOLAR & WIND APPLICATIONS

Long time discharge capacity for Solar & Wind applications

Capacity	C_{24} (Ah)	C_{48} (Ah)	C_{72} (Ah)	C_{100} (Ah)	C_{120} (Ah)
VHR 12VHR150	161	170	174	182	188
Final Voltage	1.85V				

Solar & Wind applications parameters settings

Over voltage disconnect:	2.45±0.01V/cell @ 25°C
Regulation/equalize voltage:	2.40±0.01V/cell @ 25°C
Array roconnection voltage:	2.25±0.005V/cell @ 25°C
Float voltage setting:	2.27±0.005V/cell @ 25°C
Low voltage alarm voltage:	1.95±0.005V/cell @ 25°C
Low voltage disconnect:	1.90±0.005V/cell @ 25°C
Load reconnect voltage:	2.09±0.01V/cell @ 25°C
Temp. compensate coefficienty:	-5mV/cell/°C

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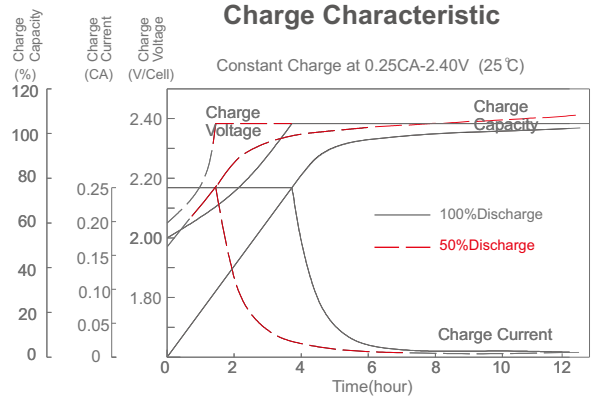
VHR 12V 150AH (12V150Ah)

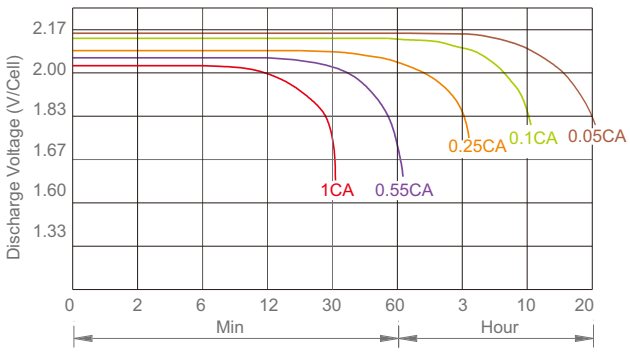
Superior Cycle Gel Battery

CHARACTERISTICS

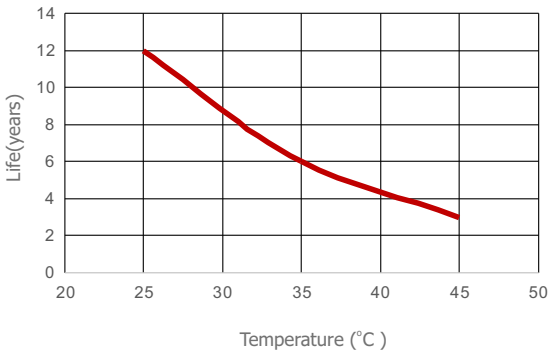
Charge Characteristic



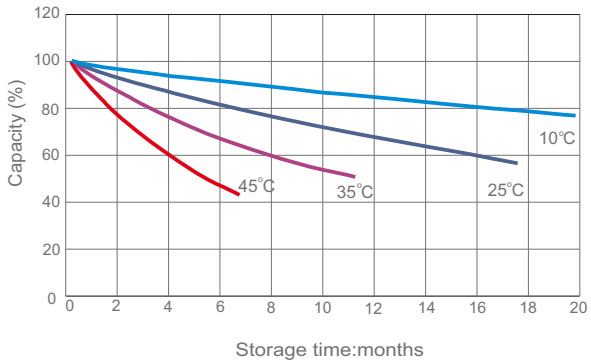
Discharge Characteristic (25℃)



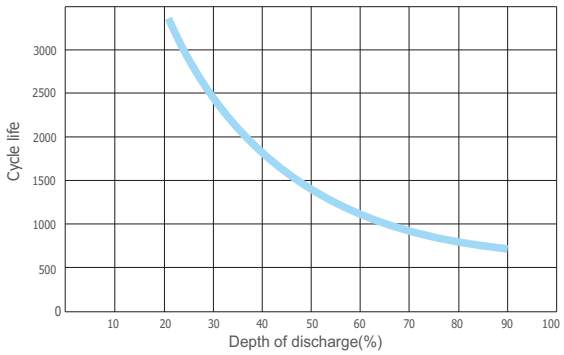
Temperature vs Float Life



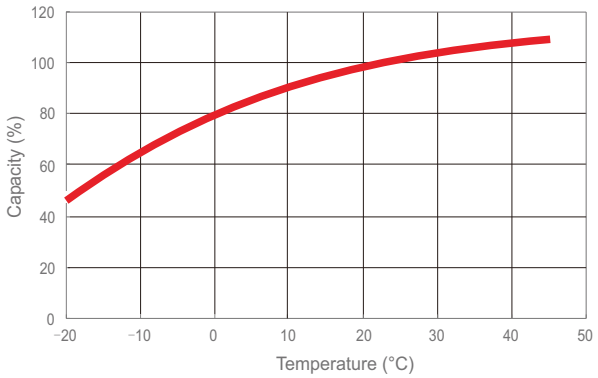
Self discharge characteristics



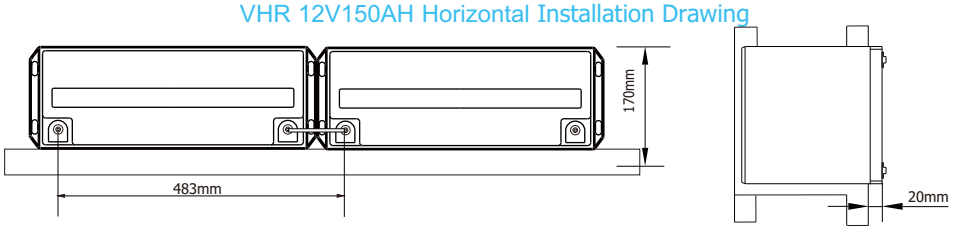
Depth of Discharge vs Cycle Life (25℃)



Capacity vs Temperature



VHR 12V150AH Horizontal Installation Drawing



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