

# VIPERTEK®



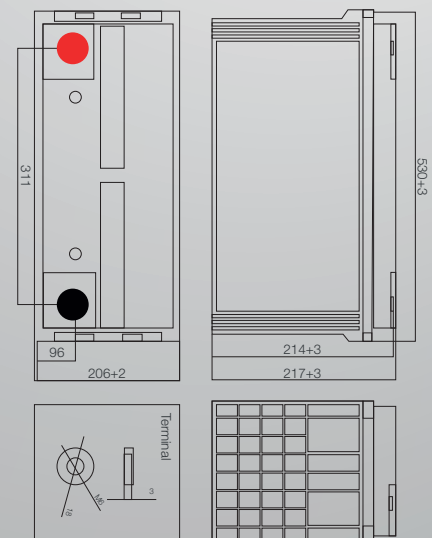
MODEL

## VIP-12150DCG

## Specification

Nominal Voltage (V)	12V (6 cells in series)
Rated Capacity	150.0Ah (C10, 1.80V/cell)
Dimensions (mm)	Length 530±3mm Width 206±3mm Height 214±3mm Total Height 217±3mm
Nominal Capacity @ 25°C (Ah)	20 Hour rate (8.250A to 10.8 volts) 165.0Ah 10 Hour rate (15.00A to 10.8 volts) 150.0Ah 5 Hour rate (25.94A to 10.8 volts) 129.7Ah 1 Hour rate (94.95A to 10.5 volts) 10.5Ah
Approx. Weight	52.5 kg
Terminal	T13
Max. Discharge Current	1200A @ 25°C (5s)
Internal Resistance	5m @ 25°C (Full Charged Battery)
DOD 80%	>700 Cycles @ 25°C
Ambient Temperature	Charge: -20°C - 50°C Discharge: -40°C - 60°C Storage: -20°C - 60°C
Container Material	A.B.S., UL94-HB UL94-V0, Optional
Self Discharge	VRLA batteries can be stored for more than 6 months at 25°C. Self-discharge ratio less than 3% per month at 25°C. Please charge batteries before using.

## Certification

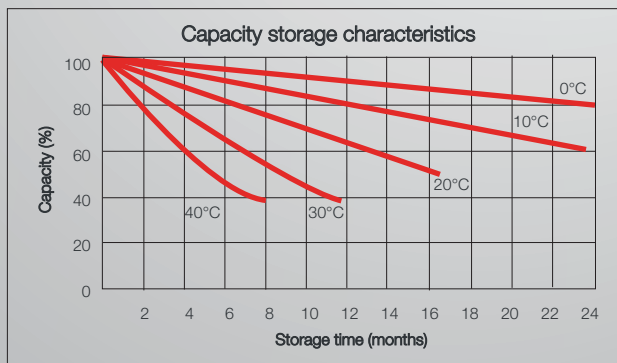
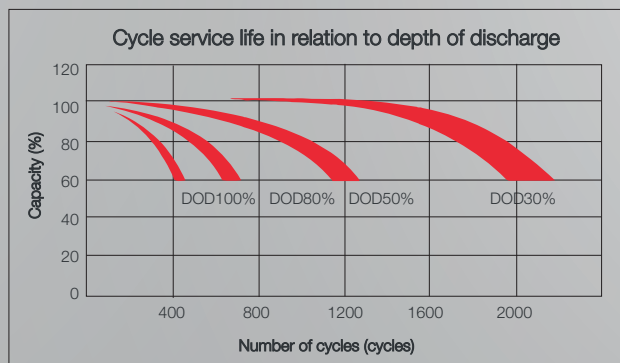
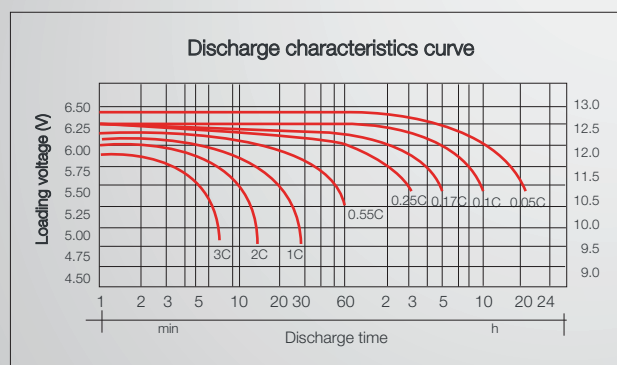
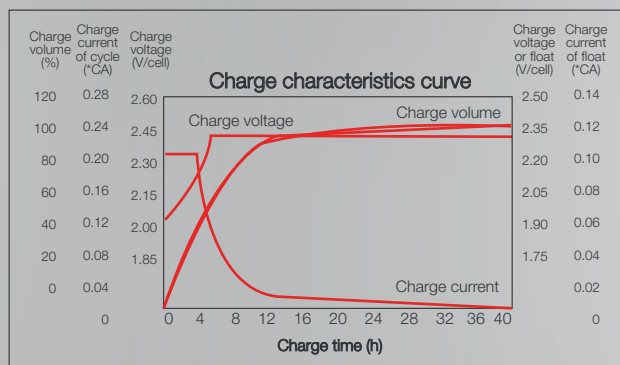


## Constant Current Discharge Characteristics (A), (25°C)

F.V/TIME	5min	10min	15min	30min	60min	2H	3H	5H	8H	10H	20H
1.60V/cell	502.0	322.5	262.5	168.8	97.50	58.28	40.32	27.05	18.63	15.60	8.547
1.70V/cell	442.5	292.5	167.5	164.3	96.15	57.53	39.83	26.73	18.33	15.30	8.483
1.75V/cell	397.5	270.0	158.5	159.8	94.95	56.78	39.38	26.33	18.15	15.15	8.403
1.80V/cell	345.0	244.5	148.5	153.6	93.00	56.00	38.63	25.94	17.88	15.00	8.250

## Constant Wattage Discharge Characteristics (Watt), (25°C)

F.V/TIME	5min	10min	15min	30min	60min	2H	3H	5H	8H	10H	20H
1.60V/cell	866.8	575.1	476.9	315.0	186.9	113.6	79.97	53.77	37.07	31.07	17.08
1.70V/cell	781.8	531.4	462.7	309.3	185.1	112.7	79.19	53.28	36.57	30.55	16.97
1.75V/cell	712.2	497.3	441.8	303.5	183.6	111.7	78.49	52.61	36.30	30.30	16.81
1.80V/cell	626.8	456.4	417.7	294.4	180.6	111.1	77.19	51.87	35.76	30.00	16.50



## Capacity Factors with Different Temperature

Battery type		-20°C	-10°C	0°C	5°C	10°C	20°C	25°C	30°C	40°C	45°C
Gel battery	6V&12V	50%	70%	83%	85%	90%	98%	100%	102%	104%	105%
	2V	60%	75%	85%	88%	92%	99%	100%	103%	105%	106%
AGM battery	6V&12V	46%	66%	76%	83%	90%	98%	100%	103%	107%	109%
	2V	55%	70%	80%	85%	92%	99%	100%	104%	108%	110%

## Maintenance & Cautions

Charging Procedure	Application	Charging method	Charge voltage at 25°C	Temperature compensation coefficient of charging voltage	Max. charging current	Temperature
	For standby power source	Constant voltage charging (with current restrictin)	Constant voltage charging (with current restrictin)	-3mV°C/cell -4mV°C/cell	0.2CA 0.3CA	-20-50°C
	For cycle service					

**Float service:** Every month, recommend inspection every battery voltage. Every 3 months, recommend equalization charge for one time. Equalization charge method: Step 1: Discharge:100% rate capacity discharge. Step 2: Charge: Max. Current 0.3CA, constant voltage 2.40-2.45V/Cell charge 24h.

**Cycle service:** Avoid battery over discharge, especially battery series connection use. Charge with recommend voltage, ensure battery can be full recharge. In general, recharge capacity should be 1.1-1.5 times discharge capacity.

**Length of service** life will be directly affected by the number of discharge cycles, depth of discharge, ambient temperature and charging voltage.

**Charge the batteries** at least once every 6 months, if they are stored at 25°C. Charging: Constant voltage: -0.2C x 2h+ 2.4-2.45V/cell x 24h, max. current 0.25CA. Constant current: -0.2C x 2h+0.1C x 12h. Fast: -0.2C x 2h+ 0.3C x 4h.

Terminal of torque	Bolt	M5	M6	M8
	Terminal	T3, T10	T4, T7, T11, T12, T13	T5, T6, T8, T9, T14
	Torque	6-7N.m	8-10N.m	10-12N.m