

DC Series

Deep Cycle series batteries are designed to have a large amount of stored current discharged between charging sessions, with very heavy non-porous battery plates to withstand repeated major discharging and charging cycle(deep cycle). The Deep-cycle batteries uses a different chemistry for the plates active paste material, and a slightly stronger electrolyte than normal battery electrolyte, which allows for a much longer life in deep cycle applications.

DC12550

(12V55Ah/10hr)

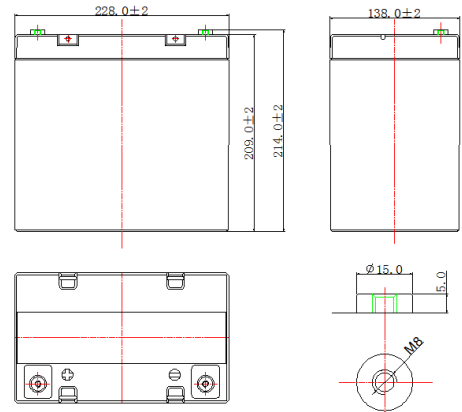


Application

- Alarm System
- Cable Television
- Power tools
- Emergency Power System
- Medical Equipment
- Solar and Wind Power System
- Communication Equipment
- Control Equipment

General Features

- Sealed and maintenance free operation.
- Non-Spillable construction design.
- ABS containers and covers (UL94HB, UL94V-0) optional.
- Safety valve installation for explosion proof .
- High quality and high reliability.
- Exceptional deep discharge recovery performance.
- Low self discharge characteristic.
- Flexibility design for multiple install positions.



CONSTRUCTION

Component	Positive plate	Negative plate	Container	Cover	Safety valve	Terminal	Separator	Electrolyte
Raw material	Lead dioxide	Lead	ABS	ABS	Rubber	Copper	Fiberglass	Sulfuric acid

TECHNOLOGY PARAMETER

Battery model	DC12550			
Designed Cycle Life	>350 Cycles @ -0.5CA to 9.6V			
Capacity (25°C)	20hR(2.79A, 10.8V)	10hR(5.5A, 10.8V)	5hR(8.89A, 10.5V)	1hR(33.8A, 9.60V)
	55.8Ah	55Ah	44.45Ah	33.8Ah
Dimensions	Length	Width	Height	Total Height
	228±2mm	138±2mm	209±2mm	214±2mm
Approx. weight (±5%)	16.5Kg			
Internal resistance	Full charged at 25°C: Approx. 8mOhms			
Self discharge	3% of capacity declined per month at 25°C (average)			
Capacity Affected by Temp.(20HR)	40 °C	25 °C	0 °C	-15 °C
	102%	100%	85%	65%
Charge Voltage (25°C)	Cycle use		Float use	
	14.4-14.7V(-30mV/°C), max. Current: 13.75A		13.6-13.8V(-20mV/°C)	



Valve Regulated Lead Acid batteries

Deep Cycle SLA battery (DC Series)

DC12550- (12V55Ah/10hr)

Constant current discharge ratings-amperes at 25°C

End Point Volts/Cell	5min	10min	15min	30min	1h	3h	5h	10h	20h
1.60V	174	132	100	58.7	33.8	14.8	9.69	5.67	2.91
1.65V	165	126	95.3	57.6	32.5	14.4	9.42	5.63	2.88
1.70V	156	119	90.4	56.6	31.3	13.9	9.15	5.56	2.86
1.75V	146	112	85.5	55.5	30.0	13.3	8.89	5.50	2.82
1.80V	136	106	80.6	54.4	28.8	12.7	8.62	5.50	2.79

Constant power discharge ratings-watts at 25°C

End Point Volts/Cell	5min	10min	15min	30min	1h	3h	5h	10h	20h
1.60V	314	238	182	107	62.1	27.5	18.0	10.6	5.47
1.65V	296	226	173	105	59.5	26.4	17.4	10.5	5.39
1.70V	277	212	163	102	56.9	25.4	16.8	10.3	5.32
1.75V	258	199	153	100	54.4	24.2	16.3	10.1	5.22
1.80V	240	187	144	97.3	51.8	23.0	15.7	10.0	5.14

