

NPL300L (2V300Ah)



The rechargeable batteries are lead-lead dioxide systems. The dilute sulfuric acid electrolyte is absorbed by separators and plates and thus immobilized. Should the battery be accidentally overcharged producing hydrogen and oxygen, special one-way valves allow the gases to escape thus avoiding excessive pressure build-up. Otherwise, the battery is completely sealed and is, therefore, maintenance-free, leak proof and usable in any position.

Battery Construction

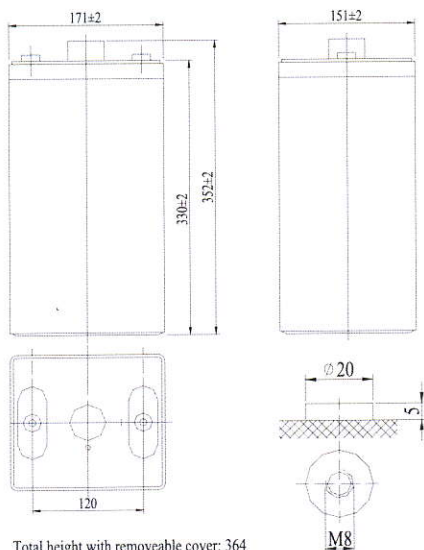
Component	Positive plate	Negative plate	Container	Cover	Safety valve	Terminal	Separator	Electrolyte
Raw material	Lead dioxide	Lead	ABS	ABS	Rubber	Copper	Fiberglass	Sulfuric acid

General Features

- Absorbent Glass Mat (AGM) technology for efficient gas recombination of up to 99% and freedom from electrolyte maintenance or water adding.
- Not restricted for air transport-complies with IATA/ICAO Special Provision A67.
- UL-recognized component.
- Can be mounted in any orientation.
- Computer designed lead, calcium tin alloy grid for high power density.
- Long service life, float or cyclic applications.
- Maintenance-free operation.
- Low self discharge.

Dimensions and Weight

Length(mm / inch)	171 / 6.73
Width(mm / inch)	151 / 5.94
Height(mm / inch)	330 / 12.99
Total Height(mm / inch)	364 / 14.33
Approx. Weight(Kg / lbs)	21 / 46.3



Performance Characteristics

Nominal Voltage	2V
Number of cell	1
Design Life	20 years
Nominal Capacity 77°F(25°C)	
10 hour rate (30A, 1.8V)	300Ah
5 hour rate (54.2A, 1.75V)	271Ah
1 hour rate (195A, 1.6V)	195Ah
Internal Resistance	
Fully Charged battery 77°F(25°C)	0.55mOhms
Self-Discharge	
3% of capacity declined per month at 20°C(average)	
Operating Temperature Range	
Discharge	-20~60°C
Charge	-10~60°C
Storage	-20~60°C
Max. Discharge Current 77°F(25°C)	1500A(5s)
Charge Methods: Constant Voltage Charge 77°F(25°C)	
Cycle use	2.35-2.45V
Maximum charging current	60A
Temperature compensation	-5.0mV/°C
Standby use	2.25-2.3V
Temperature compensation	-3.3mV/°C

Discharge Constant Current (Amperes at 77°F25°C)

End Point Volts/Cell	10min	15min	30min	45min	1h	3h	5h	10h
1.60V	493	443	325	240	195	89.5	58.7	32.1
1.65V	467	422	311	230	188	86.8	57.4	31.8
1.70V	440	400	296	220	180	84.0	55.9	31.3
1.75V	413	378	280	210	173	81.3	54.2	30.7
1.80V	385	355	265	199	165	78.5	52.3	30.0

Discharge Constant Power (Watts at 77°F25°C)

End Point Volts/Cell	10min	15min	30min	45min	1h	2h	3h	5h
1.60V	887	795	608	476	385	247	175	115
1.65V	835	756	581	460	371	241	171	113
1.70V	783	718	554	443	357	234	166	111
1.75V	732	679	527	427	342	228	162	108
1.80V	680	640	500	410	328	221	157	105

