



PVC GEL BATTERY

NG Series



NG2-700 (2V 700AH)

New Power PVC GEL Series is manufactured with PVC/SiO₂ separator and fumed Silica. Gel battery is featured with low self-discharge, strong ability to recover from deep discharging, it has long service life and 50% more deep cycle life and excellent performance at cold ambient temperatures than conventional VRLA.

Battery Construction

COMPONENT	POSITIVE PLATE	NEGATIVE PLATE	CONTAINER	COVER	SAFETY VALVE	TERMINAL	SEPARATOR	ELECTROLYTE
Raw material	Lead dioxide	Lead	ABS	ABS	Rubber	Copper	PVC/SiO ₂	Gelled Acid

Performance Characteristics

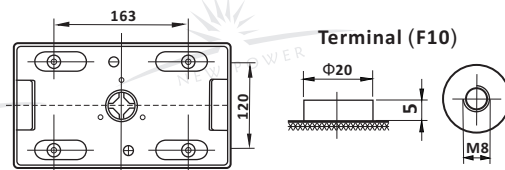
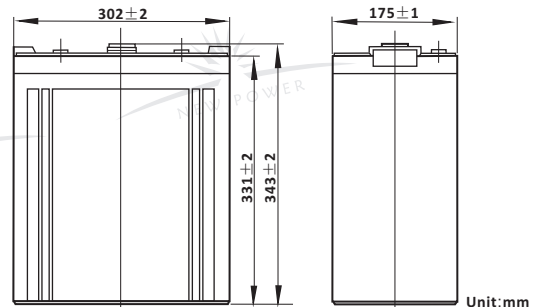
- **Nominal Voltage** 2V
- **Number of Cell** 1
- **Nominal Capacity (77°F /25°C)**
 - 100 Hour rate (7.0A, 1.85V) 700Ah
 - 10 Hour rate (60A, 1.80V) 600Ah
 - 5 Hour rate (102A, 1.75V) 510Ah
 - 1 Hour rate (346A, 1.60V) 346Ah
- **Internal Resistance**
 - Fully charged battery (77°F /25°C) 0.55mΩ
- **Capacity affected by temperature (20 hour rate)**
 - 104°F (40°C) 102% 32°F (10°C) 85%
 - 77°F (25°C) 100% 5°F (-15°C) 65%
- **Self-Discharge 68°F (20°C)**
 - Capacity after 3 month storage 90%
 - Capacity after 6 month storage 80%
 - Capacity after 12 month storage 60%
- **Max. discharge current 77°F /25°C** 2500A(5S)
- **Charge Methods: constant voltage charge 77°F /25°C**
 - Cycle use 2.38 ~ 2.42V
 - Max. Current 120A
 - Standby use 2.23 ~ 2.28V

General Features

- **Micro millimeter SiO₂ and H₂SO₄ technology for efficient gas recombination of up to 99%, free from electrolyte maintenance or water add.**
- **Not restricted for air transport-complies with IATA/ICAO Special Provision A67.**
- **A recognized component of CE and UL**
- **Computer designed lead, calcium tin alloy grid for high power density.**
- **Long service life, float or cyclic applications.**
- **Maintenance-free operation.**
- **Low self discharge**
- **Design life 15 years**

Dimensions and Weight

Type	Length	Width	Height	Total Height	Approx. Weight
SI Units	302mm	175mm	330mm	367mm	38.5Kg
English Units	11.9inch	6.89inch	13.0inch	14.5inch	84.9lbs



Total height with removable cover: 367

Constant Current Discharge (Amperes at 77°F/25°C)

V/cell	10min	15min	30min	1h	3h	5h	10h	100h
1.60	1075	824	579	346	160	110	62.9	7.65
1.65	1020	783	553	333	154	108	62.1	7.50
1.70	961	742	527	320	150	106	61.2	7.42
1.75	903	700	499	306	142	102	60.5	7.35
1.80	842	659	470	292	137	97.5	60.0	7.28
1.85	783	619	443	279	130	90.7	58.2	7.00

Constant Power Discharge (Watts at 77°F/25°C)

V/cell	10min	15min	30min	1h	3h	5h	10h	100h
1.60	1819	1399	995	625	298	207	122	14.99
1.65	1758	1357	966	608	292	197	121	14.85
1.70	1692	1304	942	588	288	193	120	14.76
1.75	1634	1267	905	568	278	186	119	14.70
1.80	1568	1219	858	552	266	181	118	14.63
1.85	1472	1169	839	532	254	175	117	14.21

(Note: The above characteristics data are average values obtained within three charge/discharge cycles not the minimum values.)



