

UP Series G120-12

GENERAL PURPOSE GEL



Main Features

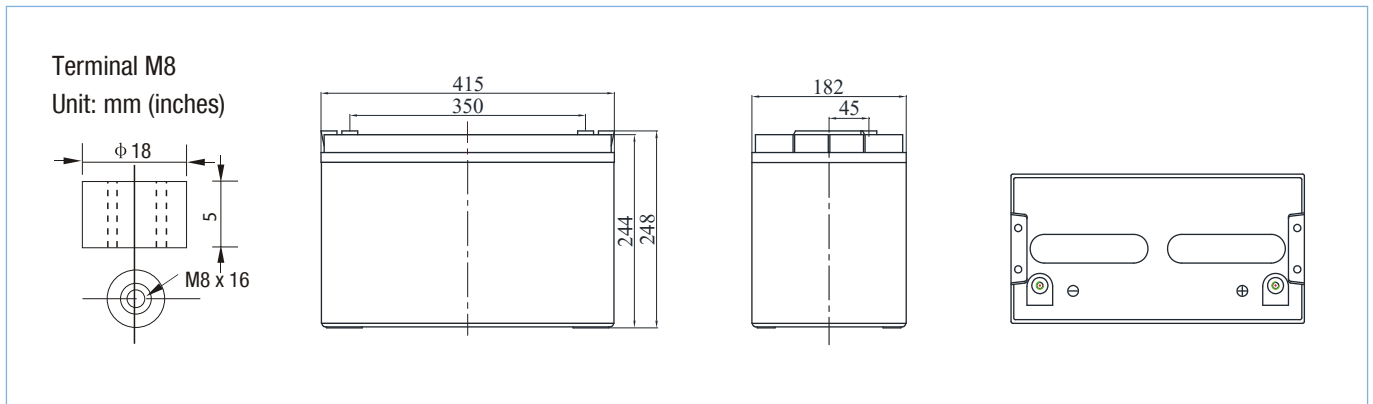
- **Longer Design Life**
Designed for 12 years of service life at 25°C.
- **Uniform Electrolyte Distribution**
Using high quality silica (silicon dioxide) we obtain a uniform electrolyte distribution for a better performance.

Technical Specifications

Nominal Voltage (V)	12
Nominal Capacity (20 Hr)	120 Ah
Dimensions	Length: 415 ± 1 mm (16.34 inches)
	Width: 182 ± 1 mm (7.17 inches)
	Container Height: 244 ± 1 mm (9.61 inches)
	Total Height (+terminal): 248 ± 1 mm (9.76 inches)
Approx. Weight	Approx. 32.5 kg (71.65 lbs)
Terminal	M8
Container Material	ABS
Rated Capacity	120.0 Ah / 6 A (20hr, 1.75V/cell, 25°C/77°F)
	111.3 Ah / 11.13 A (10hr, 1.80V/cell, 25°C/77°F)
	98.0 Ah / 19.6 A (5hr, 1.75V/cell, 25°C/77°F)
	71.0 Ah / 71.0 A (1hr, 1.60V/cell, 25°C/77°F)
Maximum Discharge Current	1100 A (5 s)
Internal Resistance	Approx. ≤ 6.0 mΩ
Operating Temperature Range	Discharge: -20 ~ 55°C (-4 ~ 131°F)
	Charge: 0 ~ 40°C (32 ~ 104°F)
	Storage: -20 ~ 50°C (-4 ~ 122°F)
Nominal Operating Temperature Range	25°C ± 3 (77°F ± 5)
Cycle Use	Initial Charging Current Less than 24 A Voltage 14.4 V - 14.9 V
Standby Use	Initial Charging Current Less than 24 A Voltage 13.6 V - 13.8 V
Capacity affected by Temperature	40°C (104°F) 108%
	25°C (77°F) 100%
	0°C (32°F) 90%
	-15°C (5°F) 70%
Self Discharge	Batteries may be stored for up to 9 months at 25°C (77°F) and then a freshening charge is required.



Battery Dimensions



Battery Discharge Tables

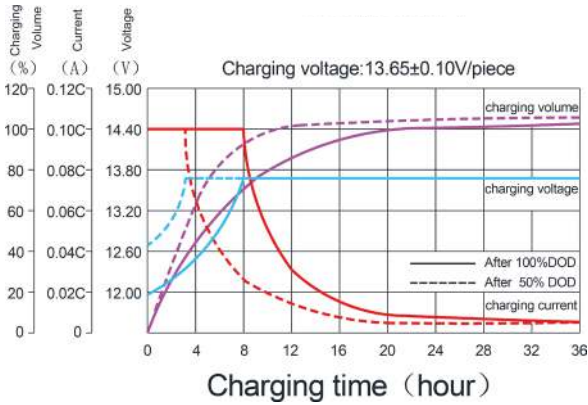
Constant Current Discharge (Amperes) at 25°C (77°F)

F.V/Time	15min	30min	45min	1h	2h	3h	5h	6h	8h	10h	20h
1.80V/cell	156.6	100.3	76.5	61.3	36.8	27.4	19.1	16.7	13.4	11.13	5.80
1.75V/cell	167.0	104.1	79.4	63.6	38.3	28.3	19.6	17.0	13.6	11.24	6.00
1.70V/cell	178.2	108.9	83.0	66.2	39.3	28.9	19.9	17.4	13.8	11.35	6.06
1.67V/cell	189.8	112.1	86.2	68.9	40.4	29.7	20.4	17.7	14.0	11.47	6.12
1.60V/cell	200.9	118.3	89.6	71.0	41.7	30.7	20.7	18.0	14.1	11.69	6.18

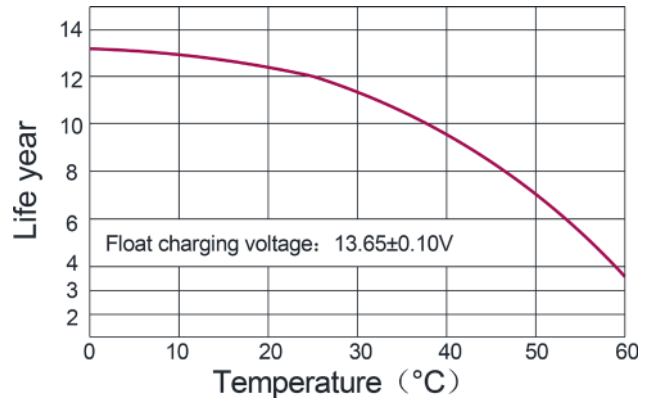
Constant Power Discharge (Watts/cell) at 25°C (77°F)

F.V/Time	15min	30min	45min	1h	2h	3h	5h	6h	8h	10h	20h
1.80V/cell	292.1	194.7	147.7	119.3	71.0	53.1	37.4	32.7	26.4	21.8	11.4
1.75V/cell	321.4	200.6	152.8	123.3	73.5	54.7	38.2	33.3	26.7	22.0	11.7
1.70V/cell	342.5	206.4	159.2	128.0	75.3	55.8	38.7	33.8	27.1	22.4	11.8
1.67V/cell	367.6	212.3	164.4	132.6	77.0	57.1	39.3	34.3	27.4	22.6	11.9
1.60V/cell	384.2	218.1	170.2	136.3	79.1	58.7	40.0	34.8	27.6	22.8	12.0

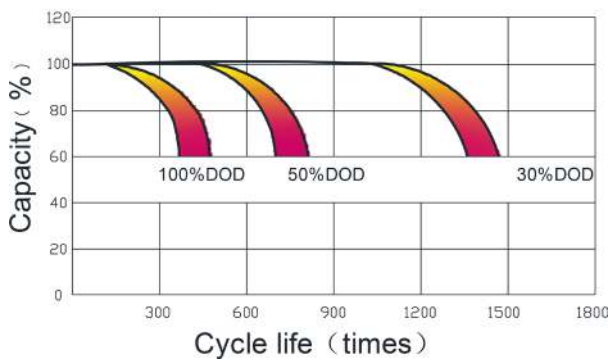
Charging Characteristics (@25°C/77°F)



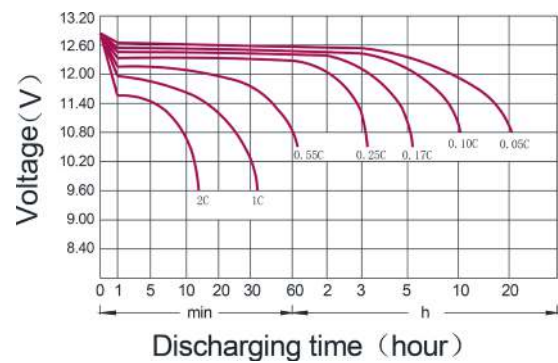
Temperature Effects on Design Service Life



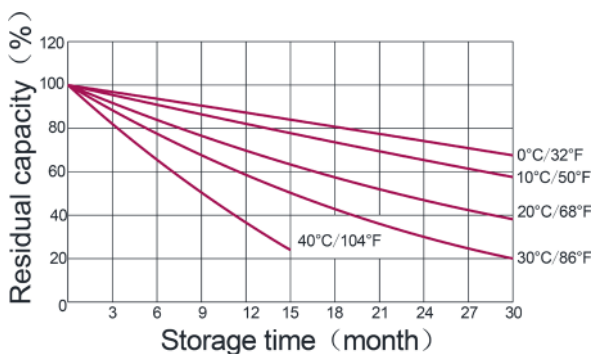
Cycle Life vs. Depth of Discharge (@25°C/77°F)



Discharge Characteristics (@25°C/77°F)



Temperature Effects on Battery Self-Discharge



Temperature Effects on Capacity

