

# UP Series G250-12

GENERAL PURPOSE GEL



## Main Features

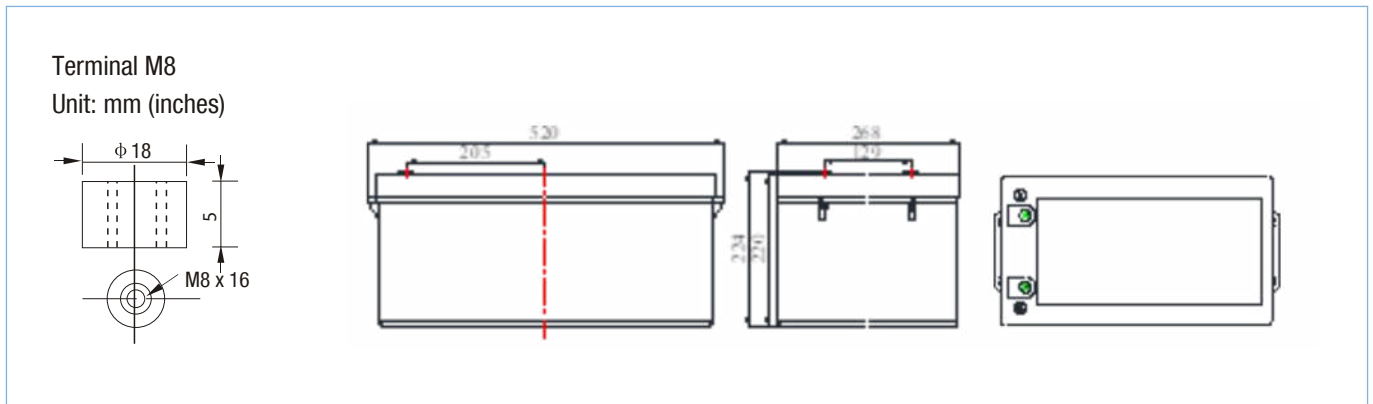
- **Longer Design Life**  
Designed for 12 years of service life at 25°C.
- **Uniform Electrolyte Distribution**  
Using high quality silica (silicon dioxide) we obtain a uniform electrolyte distribution for a better performance.

## Technical Specifications

Nominal Voltage (V)	12
Nominal Capacity (20 Hr)	250 Ah
Dimensions	Length: 520 ± 1 mm (20.47 inches)
	Width: 268 ± 1 mm (10.55 inches)
	Container Height: 220 ± 1 mm (8.66 inches)
	Total Height (+terminal): 224 ± 1 mm (8.82 inches)
Approx. Weight	Approx. 70.3 kg (154.98 lbs)
Terminal	M8
Container Material	ABS
Rated Capacity	267.6 Ah / 13.38 A (20hr, 1.75V/cell, 25°C/77°F)
	250.0 Ah / 25.0 A (10hr, 1.80V/cell, 25°C/77°F)
	220.0 Ah / 44.0 A (5hr, 1.75V/cell, 25°C/77°F)
	159.5 Ah / 159.5 A (1hr, 1.60V/cell, 25°C/77°F)
Maximum Discharge Current	2000 A (5 s)
Internal Resistance	Approx. ≤ 2.8 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 50 A Voltage 14.4 V - 14.9 V
Standby Use	Initial Charging Current Less than 50 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

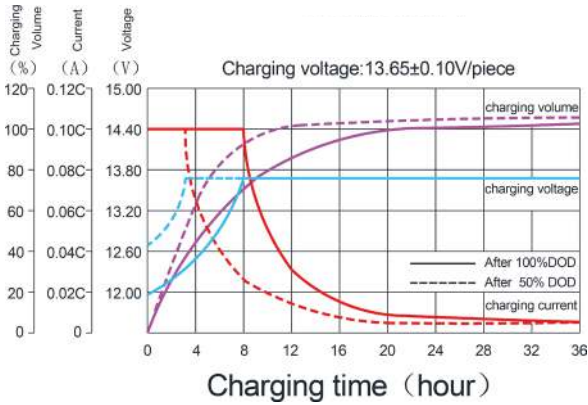


## Battery Discharge Tables

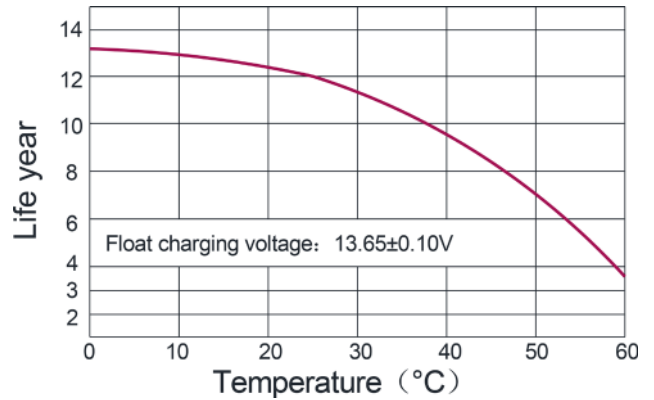
Constant Current Discharge (Amperes) at 25°C (77°F)											
F.V/Time	15min	30min	45min	1h	2h	3h	5h	6h	8h	10h	20h
1.80V/cell	351.8	225.3	171.8	137.8	82.8	61.5	43.0	37.5	30.0	25.0	13.25
1.75V/cell	375.0	233.8	178.3	142.8	86.0	63.5	44.0	38.3	30.5	25.3	13.38
1.70V/cell	400.3	244.5	186.5	148.8	88.3	65.0	44.8	39.0	31.0	25.5	13.55
1.67V/cell	426.3	251.8	193.5	154.8	90.8	66.8	45.8	39.8	31.5	25.8	13.75
1.60V/cell	451.3	265.8	201.3	159.5	93.8	69.0	46.5	40.5	31.8	26.3	13.88

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	677.5	442.0	331.8	268.0	159.5	119.3	84.0	73.5	59.3	49.5	26.4
1.75V/cell	721.8	460.8	343.3	277.0	165.0	122.8	85.8	74.8	60.0	49.8	26.6
1.70V/cell	769.3	484.0	357.5	287.5	169.0	125.3	87.0	76.0	60.8	50.3	26.9
1.67V/cell	825.5	494.8	369.3	297.8	173.0	128.3	88.3	77.0	61.5	50.8	27.2
1.60V/cell	862.8	527.8	382.3	306.0	177.8	131.8	89.8	78.3	62.0	51.3	27.4

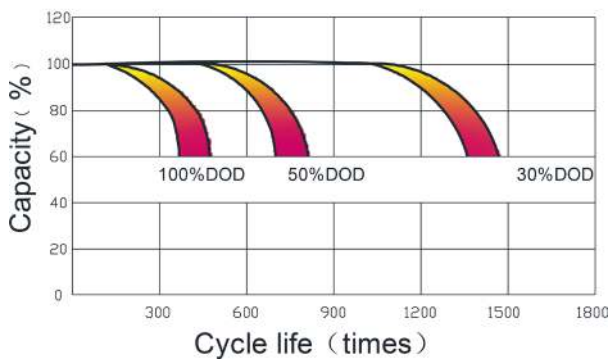
Charging Characteristics (@25°C/77°F)



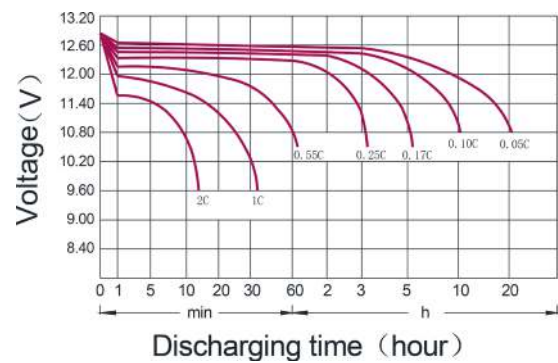
Temperature Effects on Design Service Life



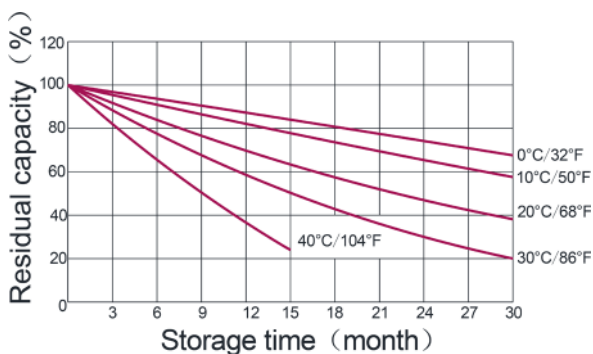
Cycle Life vs. Depth of Discharge (@25°C/77°F)



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



Temperature Effects on Battery Self-Discharge



Temperature Effects on Capacity

