### DATA SHEET

## FPC12-200 FU



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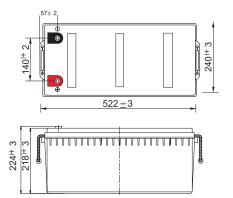




FPC Series are deep cycle batteries specially designed for long duration cyclic applications, ie with use in charge and then intensive discharge. With advanced AGM valve regulated technology and oversized negative plates, the FPC Series ensure very good cyclic performance with greater depth of discharge for mobility-type applications such as medical, golf and also renewable energies storage. In harsh use conditions (high temperature, higher deep of discharge...), the Gel FPG range is recommended.

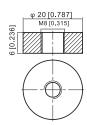
#### **DIMENSIONS & WEIGHT**

LENGHT	522±3mm
WIDTH	240±2mm
TOTAL HEIGHT	224±3mm
WEIGHT	<b>67 2kg</b> (talorance + 3%)





### TERMINAL (MM)



SPECIFICATION							
Nominal voltage	12V (6 cells)						
Nominal capacity	214.4Ah (20hr)						
Cycle life	Up to 400 cycles at 80% DOD* (80% capacity - 20°C) Up to 500 cycles at 50% DOD* (80% capacity - 20°C)						
Internal resistance	Approx 2.7mΩ						
Terminal	TII						
Max. discharge current	2000A (5 sec)						
Reference capacity	214.4Ah (20hr, 1.80V/cell, 25°C/77°F) 200.0Ah (10hr, 1.80V/cell, 25°C/77°F) 175.4Ah (5hr, 1.75V/cell, 25°C/77°F) 159.0Ah (3hr, 1.75V/cell, 25°C/77°F) 129.2Ah (1hr, 1.60V/cell, 25°C/77°F)						
Charge voltage							
Standby use voltage	13.5V ~ 13.8V 25°C/77°F						
n I I	Temperature compensation: -20mV/°C/Cell						
Cycle use voltage	14.4V ~ 15.0V 25°C/77°F Temperature compensation: -30mV/°C/Cell						
Operating temp. range	Discharge: -15°C ~ 50°C Charge: 0°C ~ 40°C Storage: -15°C ~ 40°C						
Nominal operating temp. range	25°C ± 3°C / 77°F ± 5°F						
Self discharge	Can be stored for up to 6 months at 25°C/77°F and then recharging is recommended. Monthly self-discharge ratio is less than 3% at 25°C/77°F						
Capacity affected by temp.	40°C/104°F 103% 25°C/77°F 100% 0°C/32°F 86%						
Container material	A.B.S. UL94-HB						
	*DOD = Depth of discharge						

#### **APPLICATIONS**







Golf Caddy





**APPROVALS** 

Leisure

ISO9001 - Quality management system ISO14001 - Environnmental management System Approved for transport by Air (IATA)



# DATA



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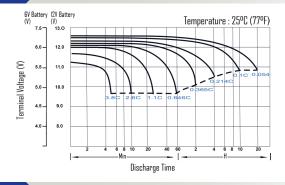
#### CONSTANT CURRENT DISCHARGE (AMPERES) AT 25°C/77°F

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	292.8	246.4	215.3	154.9	123.0	99.9	62.0	48.4	39.2	31.8	27.8	22.7	18.9	10.62
1.80V/cell	374.2	297.7	254.5	182.8	143.1	111.9	67.7	52.0	41.8	34.2	29.8	24.0	20.0	10.72
1.75V/cell	411.1	325.2	273.8	189.8	148.5	117.0	70.2	53.0	42.8	35.1	30.6	24.5	20.2	10.82
1.70V/cell	448.1	347.2	287.7	197.5	154.4	120.7	73.0	54.5	43.9	36.0	31.2	24.8	20.4	11.02
1.65V/cell	483.6	369.2	305.7	208.4	158.3	124.8	75.0	56.8	45.4	37.0	31.9	25.2	20.8	11.16
1.60V/cell	\	394.8	325.6	220.0	165.0	129.2	77.6	58.5	46.8	38.2	32.6	25.4	21.0	11.22

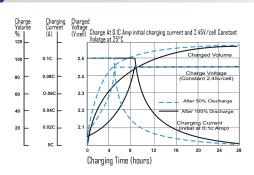
#### CONSTANT POWER DISCHARGE (WATTS/CELL) AT 25°C/77°F

F.V/Time	10min	15min	20min	30min	45min	1h	<b>2</b> h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	546.3	464.5	410.3	297.7	238.1	193.8	120.9	94.5	76.7	62.5	54.9	44.8	37.4	21.3
1.80V/cell	688.8	552.9	477.6	347.1	274.6	215.8	131.1	101.2	81.5	66.9	58.6	47.5	39.6	21.4
1.75V/cell	747.5	598.1	509.6	358.5	283.6	224.9	135.6	102.8	83.2	68.6	60.1	48.3	40.0	21.6
1.70V/cell	803.4	633.9	532.5	371.7	294.1	231.5	140.7	105.4	85.2	70.1	61.3	48.9	40.3	22.0
1.65V/cell	860.8	669.7	563.0	390.3	300.3	238.5	144.2	109.6	87.9	72.0	62.6	49.6	41.1	22.2
1.60V/cell	\	707.6	593.6	408.1	310.2	244.9	148.1	112.4	90.3	74.0	63.8	50.0	41.5	22.3

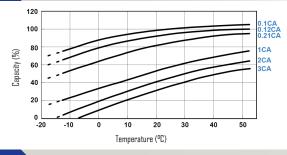
#### **DISCHARGE CHARACTERISTICS**



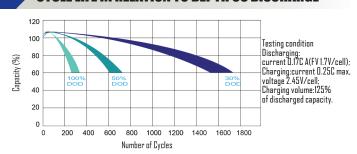
#### **CHARGING CHARACTERISTICS (CYCLE USE)**



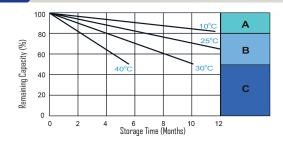
#### TEMPERATURE EFFECTS IN RELATION TO BATTERY CAPACITY



#### CYCLE LIFE IN RELATION TO DEPTH OS DISCHARGE



#### **SELF DISCHARGE CHARACTERISTICS**



- No supplementary charge required (carry out supplementary charge before use if 100% capacity is required)
- Supplementary charge required before use. Optional charging way as below: 1.Charged for above 3 days at limited current 0.25CA and constant voltage 2.25V/cell 2. Charged for above 20 hours at limted current 0.25CA and constant voltage 2.45V/cell 3. Charged for 8-10 hours at limited current 0.05CA
- C Supplementary charge may often fail to recover the capacity. The battery should never be left standing till this is reached

