

FP12-50

Datasheet

FULBAT®
GENERAL PURPOSE BATTERY



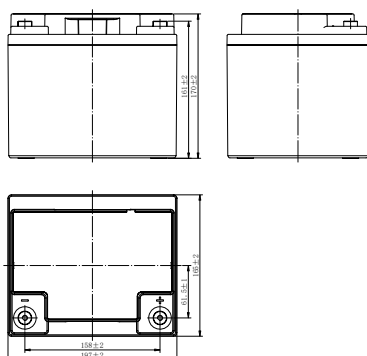
AGM

NON-SPILLABLE

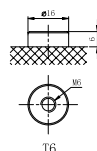
FP Series are general purpose batteries with 10 years design life in float service. With advanced AGM valve regulated technology and high purity raw material, the FP series batteries ensure high performance and reliable standby service life. They have been designed specifically for applications such as security & alarm systems, UPS, Telecom, power grid, medical equipment and emergency lighting. It can also be used for light cycling use. For intensive cycling, the FPC or FPG cyclic ranges are recommended.

DIMENSIONS & WEIGHT

Length	197±2mm
Width	165±2mm
Total height	170±2mm
Gross weight	14.20kg



TERMINAL



SPECIFICATIONS

Nominal voltage	12V (6 cells)
Nominal capacity	50.0Ah (20hr)
Design life	10 years at 25°C
Internal resistance	Approx 9mΩ
Terminal	T6
Max. discharge current	1250A (5 sec)
Reference capacity	50.00Ah (20hr, 1.75V/cell, 25°C) 45.00Ah (10hr, 1.75V/cell, 25°C) 65.80Ah (5hr, 1.75V/cell, 25°C) 59.60Ah (3hr, 1.75V/cell, 25°C) 48.50Ah (1hr, 1.60V/cell, 25°C)
Charge voltage	2.25V ~ 2.30V 25°C
Standby use voltage	Temperature compensation: -3mV/°C/Cell
Cycle use voltage	2.35V ~ 2.40V 25°C
	Temperature compensation: -5mV/°C/Cell
Operating temp. range	Discharge: -15°C ~ 50°C Charge: -20°C ~ 40°C Storage: -15°C ~ 40°C
Nominal operating temp. range	25°C ± 3°C
Self discharge	Can be stored for up to 6 months at 25°C and then recharging is recommended. Monthly self-discharge ratio is less than 3% at 25°C
Capacity affected by temp.	40°C 103% 25°C 100% 0°C 86%
Container material	A.B.S. UL94-HB UL94-V0 optional

APPROVALS

ISO9001 - Quality management system
ISO14001 - Environmental management System
Approved for transport by Air (IATA)
Designed in accordance with IEC 60896-21/22

APPLICATIONS



Emergency
& security



Telecom



UPS & data center



Medical

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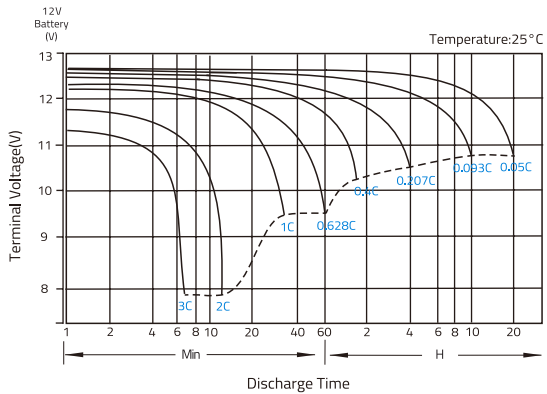
CONSTANT CURRENT DISCHARGE (A) @25°C

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	69.9	58.2	48.9	37.6	28.1	23.7	14.2	10.7	8.55	7.15	6.21	5.04	4.22	2.26
1.80V/cell	82.4	67.7	56.4	42.5	31.4	26.2	15.5	11.6	9.22	7.70	6.66	5.40	4.50	2.39
1.75V/cell	88.4	71.6	59.2	44.4	32.7	27.2	16.0	11.9	9.45	7.88	6.80	5.50	4.57	2.42
1.70V/cell	94.3	75.7	62.3	46.4	33.9	28.2	16.5	12.3	9.69	8.05	6.94	5.60	4.64	2.45
1.65V/cell	97.7	78.1	64.0	47.6	34.7	28.8	16.7	12.5	9.82	8.15	7.02	5.65	4.68	2.46
1.60V/cell	105.8	83.7	68.2	50.3	36.5	30.2	17.4	12.9	10.1	8.40	7.22	5.79	4.78	2.51

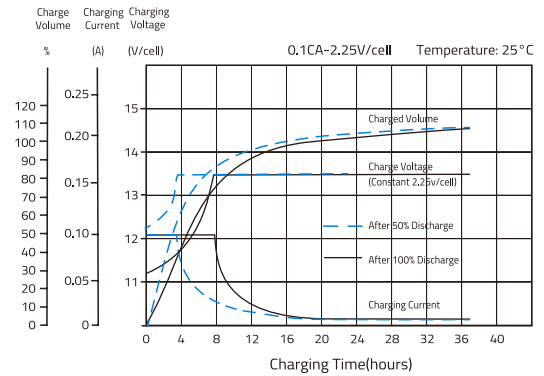
CONSTANT POWER DISCHARGE (W/CELL) @25°C

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	133.8	111.9	94.3	72.7	54.4	46.1	27.8	21.0	16.8	14.1	12.2	10.0	8.34	4.49
1.80V/cell	155.9	128.7	107.6	81.5	60.4	50.7	30.1	22.7	18.1	15.1	13.1	10.6	8.89	4.74
1.75V/cell	165.2	134.8	111.8	84.5	62.4	52.2	30.9	23.2	18.4	15.4	13.3	10.8	9.02	4.79
1.70V/cell	173.8	140.8	116.5	87.4	64.2	53.7	31.7	23.8	18.8	15.7	13.6	11.0	9.14	4.85
1.65V/cell	178.8	145.6	119.0	89.1	65.4	54.6	32.1	24.0	19.0	15.9	13.7	11.1	9.21	4.88
1.60V/cell	189.5	151.9	124.8	92.9	68.0	56.7	33.2	24.8	19.6	16.3	14.0	11.3	9.38	4.97

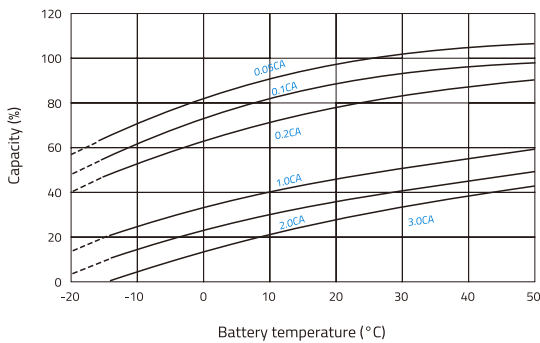
DISCHARGE CHARACTERISTICS



FLOAT CHARGING CHARACTERISTICS



TEMPERATURE IN RELATION TO BATTERY CAPACITY



TEMPERATURE ON LONG TERM FLOAT LIFE

