ALPHA HOUSE powered by MONBAT

PERFORMANCE CHARACTERISTICS

DISCHARGE PERFORMANCE AT CONSTANT CURRENT DISCHARGE (A) FOR BATTERY 12UPM4500T AT 25˚C

Uf, Vpc	5 min	10 min	15 min	30 min	45 min	1 h	2h	3 h	4 h	5 h	6 h	8 h	10 h
1.6	516.7	351.4	292.0	163.2	112.5	91.6	50.0	34.4	27.1	22.6	19.5	14.9	12.9
1.65	481.6	342.0	289.0	161.1	105.8	89.6	49.6	34.2	27.0	22.5	19.3	14.8	12.8
1.7	452.1	324.9	284.0	154.3	103.5	89.0	49.3	34.1	26.9	22.4	19.2	14.7	12.7
1.75	431.6	308.4	271.0	152.8	103.0	88.9	48.8	33.8	26.6	22.3	19.1	14.6	12.6
1.8	403.6	286.9	250.0	149.4	101.8	84.9	48.2	33.7	26.4	22.1	19.0	14.5	12.5
1.85	359.9	264.0	227.0	141.8	95.2	81.5	45.9	30.5	25.1	21.3	18.5	14.4	12.2

DISCHARGE PERFORMANCE AT CONSTANT POWER DISCHARGE W (PER CELL) FOR BATTERY 12UPM4500T AT 25˚C

Uf, Vpc	5 min	10 min	15 min	30 min	45 min	1 h	2h	3 h	4 h	5 h	6 h	8 h	10 h
1.6	1033.4	702.9	583.2	326.4	225.1	183.1	99.9	68.9	54.3	45.3	38.9	29.7	25.8
1.65	963.2	684.1	578.4	322.2	211.7	179.3	99.1	68.4	54.0	45.0	38.7	29.6	25.6
1.7	904.2	649.7	567.4	308.5	207.0	178.0	98.6	68.1	53.8	44.8	38.4	29.5	25.5
1.75	863.1	616.8	542.5	305.7	206.0	177.7	97.6	67.6	53.3	44.5	38.2	29.4	25.3
1.8	807.1	573.7	500.3	298.8	203.6	169.7	96.3	67.4	52.8	44.3	38.0	29.3	25.0
1.85	719.7	527.9	453.3	283.6	190.3	163.0	91.7	61.1	50.1	42.6	37.0	28.7	24.4

DISCHARGE PERFORMANCE AT CONSTANT POWER DISCHARGE W (PER BLOCK) FOR BATTERY 12UPM4500T AT 25˚C

Uf, Vpc	5 min	10 min	15 min	30 min	45 min	1 h	2h	3 h	4 h	5 h	6 h	8 h	10 h
1.6	6210.9	4224.4	3504.8	1961.7	1352.8	1100.7	600.4	413.9	326.1	272.0	234.0	178.4	149.2
1.65	5789.1	4111.4	3476.2	1936.5	1272.2	1077.4	595.8	411.0	324.7	270.6	232.5	178.3	149.1
1.7	5434.5	3905.0	3410.2	1854.3	1244.1	1069.7	592.8	409.5	323.2	269.1	231.1	178.2	149.0
1.75	5187.3	3706.8	3260.2	1837.0	1237.8	1068.1	586.6	406.6	320.3	267.6	229.6	177.0	147.7
1.8	4850.9	3448.0	3006.6	1795.9	1223.7	1020.1	578.9	405.1	317.4	266.2	228.2	175.0	146.3
1.85	4325.5	3172.8	2724.6	1704.3	1143.9	979.8	551.3	367.1	301.3	255.9	222.3	172.6	141.9

TEMPERATURE CORRECTION FACTOR OF CAPACITY AT CONSTANT CURRENT DISCHARGE

Discharge time	-10 °C	0 °C	10 °C	15 °C	20 °C	25 °C	30 °C	35 °C	40 °C	50 °C
From 5 to 59 minutes	0.70	0.80	0.90	0.95	0.97	1.00	1.05	1.10	1.13	1.15
From 1 to 20 hours	0.82	0.88	0.94	0.97	0.98	1.00	1.03	1.05	1.07	1.08

BATTERY CHARGE CONDITIONS AT 25˚ CONSTANT VOLTAGE AND LIMITED CURRENT (IU)

Charge current limit	Float charge voltage	Equalization charge voltage	Boost charge voltage
0.1 – 0.25C10 A Recommended: 0.20C10 A	2.27 V per cell at 25 ˚C; Temperature correction: -3 mV / cell / oC	2.32 V per cell at 25 ˚C Recommended: every 3 months for 24h during long time float operation	2.40 V per cell at 25˚C Temperature correction: -4 mV / cell / oC
Float application: 0.20C10 A / 2.27 V per cell at 25 ˚C		Cycling applications: 0.20C10 A / 2.40 V per cell at 25 ˚C; Recharge Ah input at least 105% from previous discharge Ah