



QCELL CARBON GEL BATTERIES

Maxon's QCELL Ultimate Carbon Gel series provide superior integrity and reliability. The new MEVG range are specially designed for frequent high current and deep discharge. Their superior built design adopts the advance German made Envonik Sio2 GEL technology with a special grid alloy carbon paste formula, a high purity raw material, thick plate construction and high temperature curing technology.

FEATURES

- ✓ Vibration resistant design
- ✓ Sealed and maintenance free operation
- ✓ Safety valve installation for explosion proof
- ✓ Carbon gel technology
- ✓ Thick plate design with advance PVC separators
- ✓ Low self discharge characteristic
- ✓ High cycle life

APPLICATIONS

- ✓ Off grid stand alone systems
- ✓ Marine
- ✓ Floor sweepers
- ✓ Fork lifts
- ✓ Caravans, camper vans and 4WD
- ✓ Mobility
- ✓ Golf carts



COMPLIED STANDARDS

CE	ISO9001
IEC	ISO14001
UL	ISO45001

QCELL SPECIFICATIONS

Model	Voltage	Rated Capacity @ 25°C(Ah)					Dimensions (mm)				Terminal Type	Weight Kg	Internal Resistance Full Charge @25°	
		C100 1.8Vpc@ 25°C	C20 1.8Vpc@ 25°C	C10 1.8Vpc@ 25°C	C5 1.75Vpc@ 25°C	C3 1.75Vpc@ 25°C	Length	Width	Height	Terminal Height				
Mobility Batteries														
MEVG-U1	12	n/a	36Ah	35Ah	30Ah	27Ah	196	130	154	179	M6	- +	10.5	≈7.0mΩ
MEVG-M40	12	n/a	41Ah	40Ah	33Ah	29Ah	197	166	170	170	M6	- +	14.3	≈8.0mΩ
MEVG-22NF	12	n/a	58Ah	55Ah	49Ah	42Ah	230	138	211	216	M6	+ -	16.3	≈5.3mΩ
MEVG-M24	12	n/a	78Ah	75Ah	62Ah	54Ah	260	168	211	216	M6	- +	25.0	≈5.4mΩ
Golf Cart Batteries														
MEVG-105	6	n/a	217Ah	204Ah	178Ah	156Ah	260	180	246	252	M8	- +	30.5	≈1.55mΩ
MEVG-875	8	n/a	188Ah	172Ah	155Ah	138Ah	260	182	295	301	M8	+ -	34.5	≈2.40mΩ
MEVG-1275	12	n/a	153Ah	146Ah	126Ah	110Ah	341	172	283	289	M8	+ -	43.5	≈3.10mΩ
Solar Batteries														
MEVG-105	6	235Ah	217Ah	204Ah	178Ah	156Ah	260	180	246	252	M8	- +	30.5	≈1.55mΩ
MEVG-J250	6	280Ah	265Ah	240Ah	207Ah	184Ah	295	178	354	360	M8	- +	40.5	≈1.90mΩ
MEVG-J305	6	330Ah	313Ah	300Ah	257Ah	229Ah	295	178	354	360	M8	- +	44.0	≈1.85mΩ
MEVG-L16	6	420Ah	372Ah	350Ah	289Ah	253Ah	295	178	406	412		- +	50.0	≈1.85mΩ

Design Floating Life @ 25°	12 Years	
Ambient Temperature: Discharge / Charge / Storage	-20° - 55°	
Capacity Affected by Temperature C10 Rating	40°C	103%
	25°C	100%
	0°C	86%
	-15°C	67%
Self Discharge @ 25° per Month	3%	

Charging Constant @ 25°	
Standby Charge Voltage	13.6V - 13.8V
Standby Charge Current	C0.1 - C0.25 of Ah Rating
Cycle Charge Voltage	14.1V - 14.4V
Cycle Charge Current	C0.1 - C0.25 of Ah Rating
* 6V Batteries divide by 2	

BATTERY DISCHARGE TABLE

Mobility		Discharge Constant Current per Cell (Amperes at 25°C)				
MODEL	F.V/Time	1h	3h	5h	10h	20h
MEVG-U1	10.20	21.09	9.34	6.03	3.55	1.84
	10.50	20.99	9.05	5.91	3.52	1.82
	10.80	20.88	8.76	5.80	3.49	1.79
MEVG-M40	10.20	23.75	9.84	6.84	4.19	2.15
	10.50	22.80	9.52	6.53	4.11	2.11
	10.80	21.85	9.19	6.25	4.01	2.05
MEVG-22NF	10.20	32.3	14.28	9.92	5.83	3.04
	10.50	31.8	13.84	9.73	5.78	2.99
	10.80	31.5	13.36	9.52	5.52	2.88
MEVG-M24	10.20	45.10	18.65	12.95	7.63	4.07
	10.50	43.20	18.05	12.37	7.53	4.00
	10.80	41.50	17.41	11.83	7.50	3.88

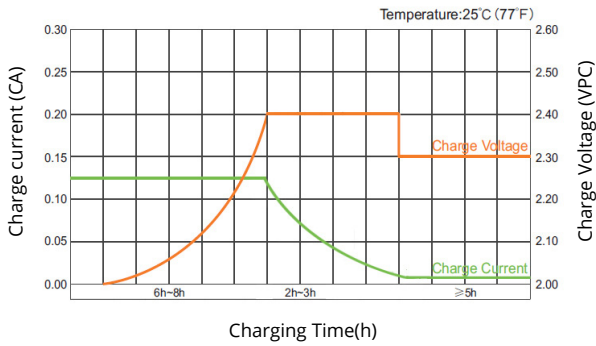
Golf Cart		Discharge Constant Current per Cell (Amperes at 25°C)				
MODEL	F.V/Time	1h	3h	5h	10h	20h
MEVG-105	5.10	129.50	53.69	37.29	20.62	11.11
	5.25	124.40	51.89	35.60	20.50	11.00
	5.40	119.10	50.09	34.07	20.36	10.86
MEVG-875	6.80	112.30	48.39	32.34	18.78	9.65
	7.00	108.10	45.94	30.90	18.00	9.54
	7.20	103.40	43.39	29.46	17.21	9.40
MEVG-1275	10.20	91.40	37.90	26.30	14.90	7.81
	10.50	87.70	36.60	25.10	14.75	7.75
	10.80	84.00	35.40	24.00	14.56	7.64

Solar		Discharge Constant Current per Cell (Amperes at 25°C)				
MODEL	F.V/Time	3h	5h	10h	20h	100h
MEVG-J250	5.10	64.70	43.20	24.59	13.78	2.66
	5.25	61.40	41.30	24.05	13.51	2.80
	5.40	58.00	39.40	23.50	13.25	2.80
MEVG-J305	5.10	80.52	53.81	31.25	16.06	3.31
	5.25	76.44	51.41	29.95	15.87	3.30
	5.40	72.20	49.02	28.64	15.64	3.30
MEVG-L16	5.10	87.20	60.50	35.70	19.40	4.32
	5.25	84.20	57.80	35.00	19.00	4.27
	5.40	81.30	55.30	34.00	18.60	4.20

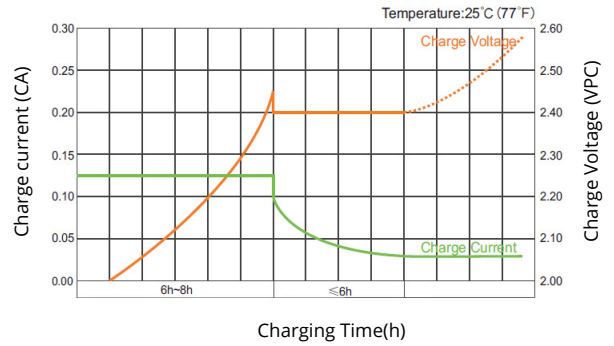
Note: The above data are average values, and can be obtained within 3 charge/discharge cycles. These are not minimum values. Cell and battery designs/specifications are subject to modification without notice.

PERFORMANCE CHARACTERISTICS

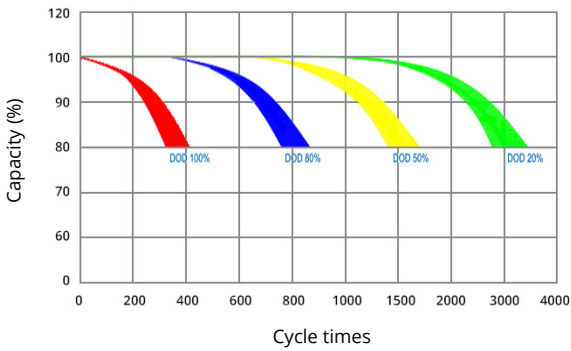
Voltage Regulated Charger – IUU



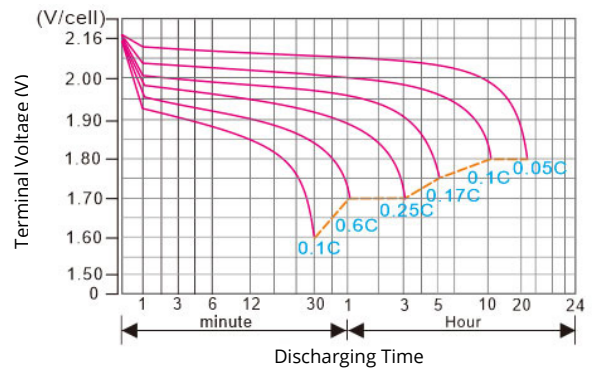
Constant Current Charger – IUI



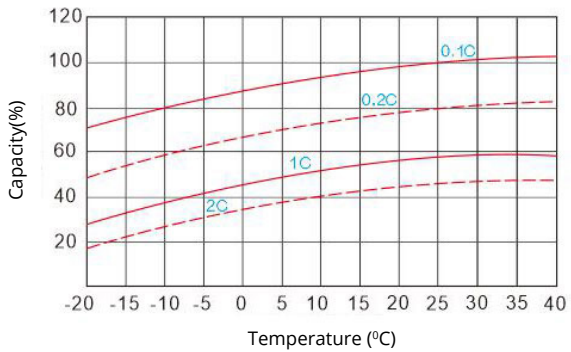
Cycle Life in Relation to Depth of Discharge



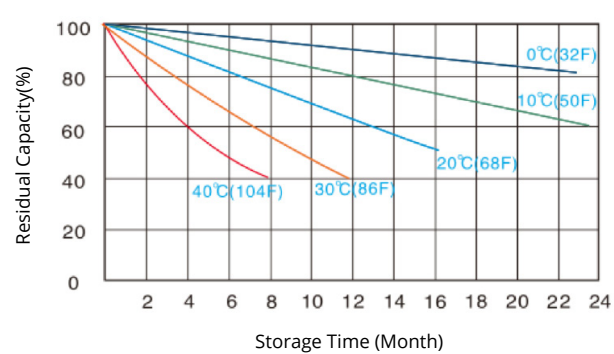
Discharge Characteristic (25°C/77°F)



Capacity Curve At Different Temperature



Self Discharge Characteristics



BATTERY CONSTRUCTION

Component	Positive plate	Negative	Container & Cover	Safety valve	Separator	Electrolyte	Pillar seal
Features	Thick high Sn low Ca grid with special paste	Balanced Pb-Ca grid with Carbon Additive Paste	ABS	Flame Si-Rubber	Advanced PVC separators	Envonik Sio2 Gel imported from Germany	Two layers epoxy resin seal