



PHOTOVOLTAIC BATTERIES



UNIGY II MODULES

The **DEKA UNIGY II LINE** features two module designs with a wide range of capacities and sizes to fit the requirements of renewable energy applications. These modules are constructed using the finest quality materials and state-of-the-art manufacturing techniques enhancing their performance in these demanding applications.

Built-in advanced features such as:

- “Two Way” Post design is lead plated solid copper providing a large contact area with front access bolting for easier installation and maintenance.
- Pure Lead (99.2%) positive grid alloy is very resistance to corrosion/growth.
- Positive and Negative plates are tank formed to ensure plates operate at 100% capacity.
- Collapsible bottom bridge accommodates for normal plate growth, reducing stress on battery post seals.
- Air Gap between cells has been designed to reduce foot print while maintaining required cooling.
- Front safety shield design easily clips on and off without tools for quicker assembly.

DEKA UNIGY II INTERLOCK™ SYSTEM utilizes:

- Interlocking modules require only front access bolts for mounting, providing quick and safe installation.
- Modules are coated with acid resistant epoxy powder paint.
- Each module has mounting holes for grounding option.
- Standard one-piece base enables it to be used as anchoring template. Anchors can be drilled and installed with base in place.
- Certified to UBC 97 Zone 4 Top of Building up to 8 modules high.

DEKA UNIGY II NON-INTERLOCK SYSTEM utilizes:

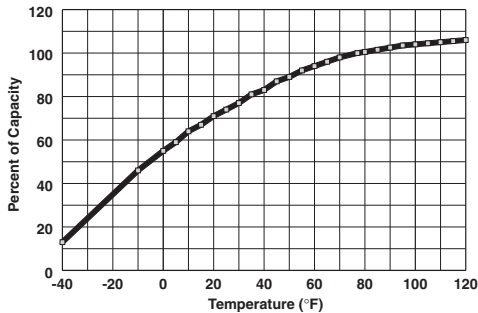
- Non-Interlock modules require front and rear access bolts for mounting, providing easy and safe installation.
- Modules are coated with acid resistant epoxy powder paint.
- Each module has mounting holes for grounding option.
- Standard two-piece base enables anchors to be drilled and installed with base in place.
- Certified to UBC 97 Zone 2B Top of Building up to 8 modules high.

FEATURES AND BENEFITS	
Container and Cover	Impact-Resistant Polypropylene, 28% L.O.I. (Optional)
Separators	Microporous Glass Mat
Tank Formed Plates	Shipped at 100% Capacity
Cycle Life	2400 cycles @ 20% DOD

CELL TYPE	Ratings in Amperes at 77°F (25°C) to											
	1.75 v.p.c.				1.81 v.p.c.				1.84 v.p.c.			
	8 HR.	10 HR.	24 HR.	100 HR.	8 HR.	10 HR.	24 HR.	100 HR.	8 HR.	10 HR.	24 HR.	100 HR.
AVR45-5	11.0	10.0	5.0	1.2	11.0	9.0	5.0	1.2	11.0	9.0	4.0	1.2
AVR45-7	17.0	14.0	7.0	1.8	17.0	14.0	7.0	1.8	16.0	14.0	7.0	1.8
AVR45-9	23.0	19.0	9.0	2.4	22.0	19.0	9.0	2.4	22.0	18.0	9.0	2.4
AVR45-11	29.0	24.0	11.0	3.0	28.0	23.0	11.0	3.0	27.0	23.0	11.0	2.9
AVR45-13	34.0	29.0	14.0	3.6	34.0	28.0	13.0	3.6	33.0	27.0	13.0	3.5
AVR45-15	40.0	34.0	16.0	4.2	39.0	33.0	16.0	4.2	38.0	32.0	15.0	4.1
AVR75-5	20.0	16.0	8.0	2.1	19.0	16.0	7.0	2.0	18.0	15.0	7.0	2.0
AVR75-7	29.0	25.0	12.0	3.1	28.0	23.0	11.0	3.0	27.0	23.0	11.0	2.9
AVR75-9	39.0	33.0	16.0	4.2	37.0	31.0	15.0	4.0	36.0	30.0	15.0	3.9
AVR75-11	49.0	41.0	20.0	5.2	47.0	39.0	19.0	5.0	45.0	38.0	18.0	4.9
AVR75-13	59.0	49.0	23.0	6.3	56.0	47.0	22.0	6.0	54.0	46.0	22.0	5.9
AVR75-15	69.0	57.0	27.0	7.3	65.0	54.0	26.0	7.0	63.0	53.0	26.0	6.8
AVR75-17	79.0	66.0	31.0	8.4	74.0	62.0	30.0	8.0	72.0	61.0	29.0	7.8
AVR75-19	88.0	74.0	35.0	9.4	84.0	70.0	33.0	9.0	82.0	68.0	33.0	8.8
AVR75-21	98.0	82.0	39.0	10.5	93.0	78.0	37.0	10.0	91.0	76.0	36.0	9.8
AVR75-23	108	90.0	43.0	11.5	102	86.0	41.0	11.0	100	84.0	40.0	10.8
AVR75-25	118	98.0	47.0	12.5	112	93.0	45.0	12.0	109	91.0	44.0	11.7
AVR75-27	128	107	51.0	13.6	121	101	48.0	13.0	118	99.0	47.0	12.7
AVR75-29	138	115	55.0	14.6	130	109	52.0	14.0	127	106	51.0	13.7
AVR75-31	147	123	59.0	15.7	140	117	56.0	15.0	136	114	55.0	14.7
AVR75-33	157	131	63.0	16.7	149	124	59.0	16.0	145	122	58.0	15.7
AVR95-7	35.6	29.8	14.5	4.0	35.0	29.4	14.4	4.0	34.4	28.9	14.2	3.9
AVR95-9	47.5	39.8	19.3	5.4	46.7	39.2	19.2	5.3	45.9	38.6	18.9	5.3
AVR95-11	59.4	49.7	24.2	6.7	58.4	49.0	23.9	6.7	57.3	48.2	23.7	6.6
AVR95-13	71.2	59.6	29.0	8.1	70.1	58.9	28.7	8.0	68.8	57.9	28.4	7.9
AVR95-15	83.1	69.6	33.8	9.4	81.8	68.7	33.5	9.3	80.3	67.5	33.1	9.2
AVR95-17	95.0	79.5	38.7	10.8	93.5	78.5	38.3	10.6	91.7	77.2	37.8	10.5
AVR95-19	107	89.5	43.5	12.1	105	88.3	43.1	12.0	103	86.8	42.6	11.8
AVR95-21	119	99.4	48.3	13.4	117	98.1	47.9	13.3	115	96.5	47.3	13.1
AVR95-23	131	109	53.2	14.8	129	108	52.7	14.6	126	106	52.0	14.5
AVR95-25	142	119	58.0	16.1	140	118	57.5	16.0	138	116	56.8	15.8
AVR95-27	154	129	62.8	17.5	152	128	62.2	17.3	149	125	61.5	17.1
AVR95-29	166	139	67.7	18.8	164	137	67.0	18.6	161	135	66.2	18.4
AVR95-31	178	149	72.5	20.2	175	147	71.8	20.0	172	145	71.0	19.7
AVR95-33	190	159	77.3	21.5	187	157	76.6	21.3	183	154	75.7	21.0

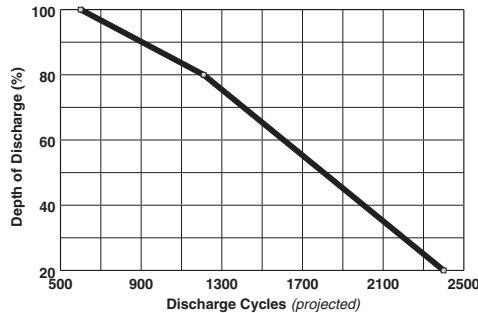
Temperature Effects on Capacity

Capacity Curve (1 Hr. to 100 Hr.)



Depth of Discharge vs. Cycles

Cycle Curve



QUALITY SYSTEM
CERTIFIED TO
ISO 9001
ISO/TS 16949
ISO 14001



UL Recognized Component

"POWERED FOR PERFORMANCE"®
EAST PENN manufacturing co., inc.

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