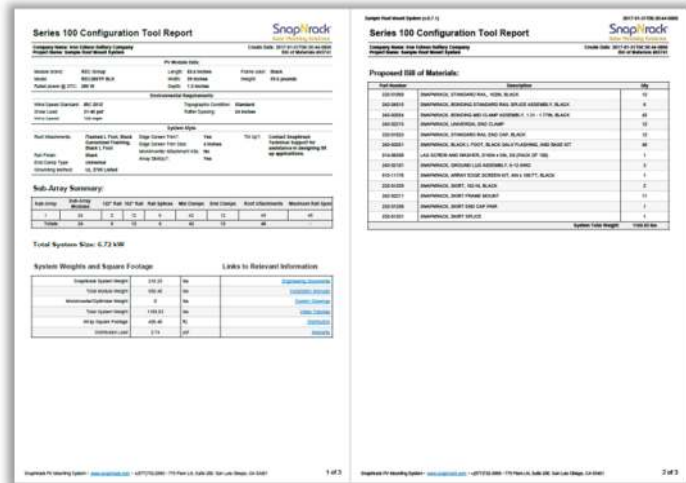


# How to Decipher the Snap N Rack Configuration Tool Report



## Series 100 Configuration Tool Report



Company Name: Iron Edison Battery Company  
Project Name: Sample Roof Mount System

Create Date: 2017-01-31T06:30:44-0800  
Bill of Materials #65741

### PV Module Data:

Module brand:	REC Group	Length:	65.6 inches	Frame color:	Black
Model:	REC280TP BLK	Width:	39 inches	Weight:	39.6 pounds
Rated power @ STC:	280 W	Depth:	1.5 inches		

- Specifications on the PV panel specified on this project, including electrical, dimensions, color and weight.

### Environmental Requirements:

Wind Speed Standard:	IBC 2012	Topographic Condition:	Standard
Snow Load:	31-40 psf	Rafter Spacing:	24 inches
Wind Speed:	120 mph		

- **Wind Speed Standard:** IBC 2009 / IBC 2012 – Determines which international building code wind speed requirements are enforced at the project site.
- **Snow Load:** pounds per square foot snow load capacity the racking system is designed to withstand.
- **Wind Speed:** MPH wind speed the racking system is designed to withstand.
- **Topographical Condition:** Standard / Top of Hill / Costal / Mesa.
- **Rafter Spacing:** Distance between roof rafters.

System Style:					
Roof Attachments:	<b>Flashed L Foot, Black Galvanized Flashing, Black L Foot</b>	Edge Screen Trim?:	<b>Yes</b>	Tilt Up?:	<b>Contact SnapNrack Technical Support for assistance in designing tilt up applications.</b>
Rail Finish:	<b>Black</b>	Edge Screen Trim Size:	<b>4 inches</b>		
End Clamp Type:	<b>Universal</b>	Microinverter Attachment Kits:	<b>No</b>		
Grounding Method:	<b>UL 2703 Listed</b>	Array Skirt(s):	<b>Yes</b>		

- **Roof Attachments:** Type of hardware specified to attach the rails to the roof.
- **Rail Finish:** How the rails are finished (color).
- **End Clamp Type:** Type of end clamps specified for this project.
- **Grounding Method:** The racking system is UL 2703 Listed.
- **Edge Screen Trip:** If it's included and size.
- **Microinverter Attachment Kits:** optional brackets to install micro inverters for each PV panel.
- **Array Skirt:** If a skirt along the bottom edge of the array is included.
- **Tilt Up?:** If this design includes the option to tilt the array up at a steeper angle than the roof angle.

### Sub-Array Summary:

Sub-Array	Sub-Array Modules	122" Rail	162" Rail	Rail Splices	Mid Clamps	End Clamps	Roof Attachments	Maximum Rail Span
1	24	0	12	6	42	12	48	48
<b>Totals:</b>	<b>24</b>	<b>0</b>	<b>12</b>	<b>6</b>	<b>42</b>	<b>12</b>	<b>48</b>	<b>-</b>

- Materials list and quantities for each sub-array in this project.

### System Weights and Square Footage

### Links to Relevant Information

SnapNrack System Weight	216.23	lbs	<a href="#">Engineering Documents</a>
Total Module Weight	950.40	lbs	<a href="#">Installation Manuals</a>
Microinverter/Optimizer Weight	0	lbs	<a href="#">System Drawings</a>
Total System Weight	1166.63	lbs	<a href="#">Video Tutorials</a>
Array Square Footage	426.40	ft <sup>2</sup>	<a href="#">Distributors</a>
Distributed Load	2.74	psf	<a href="#">Warranty</a>

- Racking system weight specifications, size and load details.

### Proposed Bill of Materials:

Part Number	Description	Qty
232-01069	SNAPNRACK, STANDARD RAIL, 162IN, BLACK	12
242-04015	SNAPNRACK, BONDING STANDARD RAIL SPLICE ASSEMBLY, BLACK	6
242-02054	SNAPNRACK, BONDING MID CLAMP ASSEMBLY, 1.31 - 1.77IN, BLACK	42
242-02215	SNAPNRACK, UNIVERSAL END CLAMP	12
232-01023	SNAPNRACK, STANDARD RAIL END CAP, BLACK	12
242-92051	SNAPNRACK, BLACK L FOOT, BLACK GALV FLASHING, AND BASE KIT	48
014-06509	LAG SCREW AND WASHER, 5/16IN x 5IN, SS (PACK OF 100)	1
242-02101	SNAPNRACK, GROUND LUG ASSEMBLY, 6-12 AWG	3
015-11176	SNAPNRACK, ARRAY EDGE SCREEN KIT, 4IN x 100 FT, BLACK	1
232-01259	SNAPNRACK, SKIRT, 162 IN, BLACK	2
242-92211	SNAPNRACK, SKIRT FRAME MOUNT	11
232-01250	SNAPNRACK, SKIRT END CAP PAIR	1
232-01251	SNAPNRACK, SKIRT SPLICE	1
<b>System Total Weight:</b>		<b>1166.63 lbs</b>

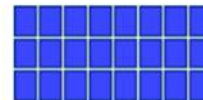
- List & quantity of materials that will be provided for this project.

### Sub-Array #1 P(3x8)

The maximum recommended Rail Span for this sub-array is **48 inches**. Rail Span reduction for modules located in the edge zone is not required.

Group 1 Rail Length	Group 2 Rail Length	Group 3 Rail Length	Group 4 Rail Length	Group 5 Rail Length	122" Rail Qty	162" Rail Qty	Row Mid Clamps	Row End Clamps	Row Splices	Attachments	Module Bonding	Rail Bonding
315	-	-	-	-	0	4	14	4	2	16	0	1
315	-	-	-	-	0	4	14	4	2	16	0	1
315	-	-	-	-	0	4	14	4	2	16	0	1
<b>Sub-Array Totals:</b>					<b>0</b>	<b>12</b>	<b>42</b>	<b>12</b>	<b>6</b>	<b>48</b>	<b>0</b>	<b>3</b>

Orientation	Rows	Columns	Array Pitch	Building Height
Portrait	3	8	30 degrees	12 feet



- Details of each Sub-Array in the system, including materials list and PV panel orientation.

Series 100 Structural Engineering Report			
Maximum Rail Span		Maximum Rail Cantilever	
Interior	Edge Zone	Interior	Edge Zone
66 inches	66 inches	22 inches	22 inches

Attachment Spacing Adjusted for Rafter Spacing				
Rafter Spacing	Max Attachment Spacing		Max Cantilever	
	Interior	Edge Zone	Interior	Edge Zone
24 inches	48 inches	48 inches	16 inches	8 inches

- Engineering Details, including rail spacing and attachment distances.