

Series 200 Configuration Tool Report

Company Name: **Big Dog Solar**
Project Name: **9911 Avenida Hermosa**

Create Date: **2020-06-26T15:17:53-0400**
Bill of Materials #**147731**

PV Module Data:

| | | | | | |
|--------------------|----------------------|---------|---------------------|---------------------|--------------------|
| Module brand: | Jinko Solar | Length: | 66.3 inches | Frame color: | Silver |
| Model: | JKM315M-60HBL | Width: | 39.45 inches | Module Clamp Color: | Silver |
| Rated power @ STC: | 315 W | Depth: | 1.38 inches | Weight: | 41.9 pounds |

Environmental Requirements:

| | | | |
|------------------------|------------------|------------------------------|-------------------|
| Wind Speed Standard: | IBC 2018 | Tilt: | 20 degrees |
| Snow Load: | 31-40 psf | Existing Terrain: N-S Slope: | 0 degrees |
| Wind Speed: | 130 mph | End Clamp Type: | Universal |
| Topographic Condition: | Standard | | |

Array Information:

| | | | |
|---------------------------------|---------------------------|--------------------------------|-----------------------|
| Number of rows per array: | 4 High (Landscape) | Grounding Method: | UL 2703 Listed |
| Number of columns per array: | 8 columns | Foundation Option: | Standard Pier |
| Number of arrays: | 1 arrays | Bracing: | Braced |
| Minimum Height of Leading Edge: | 37 inches | 1.5" Pipe: | Sch.40 |
| Module Overhang: | 15 inches | Microinverter Attachment Kits: | Frame Mount |

Proposed Bill of Materials:

| Part Number | Description | Qty |
|-------------|---|-----|
| 232-01072 | SNAPNRACK, GROUND RAIL, 162IN, SILVER | 16 |
| 242-02050 | SNAPNRACK, BONDING MID CLAMP, 30-38MM (1.19-1.49IN), SILVER | 48 |
| 242-02215 | SNAPNRACK, UNIVERSAL END CLAMP | 32 |
| 242-09004 | SNAPNRACK, BONDING PIPE CLAMP ASSEMBLY FOR 1-1/2IN | 32 |
| 232-01043 | SNAPNRACK, GROUND RAIL END CAP, BLACK | 32 |
| 242-02101 | SNAPNRACK, GROUND LUG ASSEMBLY, 6-12 AWG | 1 |
| 172-05800 | HOLLAENDER, 5E-8, SINGLE SOCKET TEE, 1-1/2IN, AL-MG | 14 |
| 172-05803 | HOLLAENDER, 17-8, SINGLE ADJUSTABLE SOCKET TEE, 1-1/2IN, AL-MG | 42 |
| 172-05804 | HOLLAENDER, 19E-8, DOUBLE ADJUSTABLE SOCKET TEE, 1-1/2IN, AL-MG | 10 |
| 172-05808 | HOLLAENDER, 62-8, PLUG END, 1-1/2IN, AL | 18 |
| 242-02151 | SNAPNRACK, MLPE FRAME ATTACHMENT KIT | 32 |

Links to Relevant Information

[Engineering Documents](#)

[Installation Manuals](#)

[System Drawings](#)

[Video Tutorials](#)

[Distributors](#)

[Warranty](#)

**HEIGHT OF SOLAR ARRAY
APPEARS TO BE OVER 7' -
DRAWINGS STAMPED BY
A COLORADO DESIGN
PROFESSIONAL REQUIRED
FOR STRUCTURE AND
FOUNDATION**

DISAPPROVED

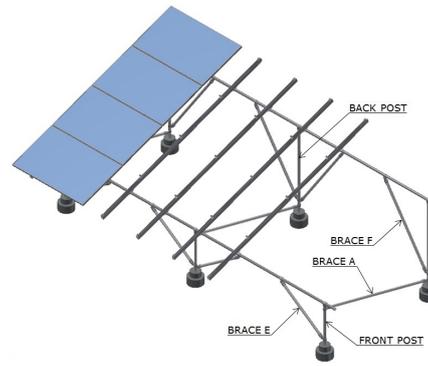
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CONSTRUCTION

BRACED OPTIONS:

Maximum E-W post spacing: **81 inches**
 Adjusted E-W post spacing: **81 inches**
 N-S post spacing: **90.21 inches**
 Rails per Column: **2**
 Total Array Length: **44.3 feet**
 E-W exterior post distance: **40.5 feet**
 E-W exterior rail distance: **41.8 feet**
 Rail Span (RS): **96 inches**
 Rail Overhang (RO): **31.5 inches**
 Total Number of Modules: **32**
 Pier Diameter: **12 inches**
 Front Pier Depth: **60 inches**
 Back Pier Depth: **60 inches**



Front Post:

Per Array: **7 posts**
 Above grade: **47.77 inches**
 Total length: **107.77 inches**
 Total quantity: **7 posts**
 Total feet of pipe: **62.87 feet**

Back Post:

Per Array: **7 posts**
 Above grade: **80.6 inches**
 Total length: **140.6 inches**
 Total quantity: **7 posts**
 Total feet of pipe: **82.02 feet**

Horizontal:

Per Array: **2**
 Length: **44.3 feet**
 Total quantity: **2**
 Total feet: **89**

Brace A:

Per Array: **7**
 Length: **102 inches**
 Total quantity: **7**
 Total feet: **60**

Brace E:

Per Array: **12**
 Length: **54 inches**
 Total quantity: **12**
 Total feet: **55**

Brace F:

Per Array: **12**
 Length: **85 inches**
 Total quantity: **12**
 Total feet: **86**

NOTE: All pipe lengths are estimated to be slightly long. Pipe fittings will slightly reduce length of cross braces, and terrain variations may effect lengths as well. Pipe is typically purchased from a plumbing supply in 21 foot sections. It is important to make sure the pipe is threaded on both ends and includes a coupler. Use this coupler to connect pipe sections together for the Horizontal Pipe.

Total:

Total Posts: **14**
 Total Pipe: **441 feet**

Concrete Estimate:

Cubic Yards: **2.4**
 60 lb Bags of Concrete: **120**