



**RB-1100**  
**1 PANEL RAQ in a BOX B**  
**UPC: 00868479000187**



**RB-1100 BI-FOLD FOLDED**

**RB-1100 BOX DIMENSIONS**

Length	42"	1066.8 mm
Width	8"	203.2 mm
Height	8.5"	215.9 mm
Weight	16 lbs.	7.26 kg

Length	42"	1066.8 mm
Width	9"	228.60 mm
Height	3"	215.9 mm
Weight	18 lbs.	8.2 kg

**RB-1100 UNFOLDED DIMENSIONS**

**RB-1100 PALLET DIMENSIONS**

Length	42"	1066.8 mm
Width	39.5"	1003.3mm
Weight	16 lbs.	7.25
Height	8.25"	209.55 mm

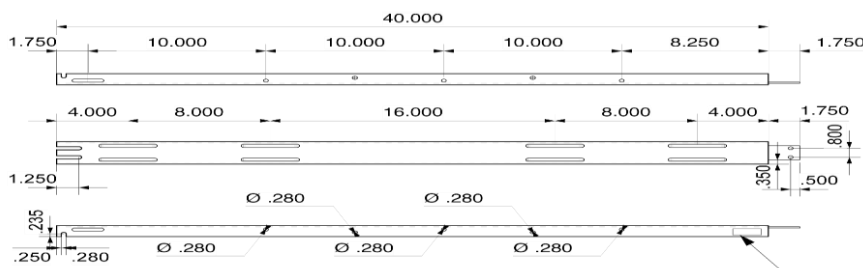
Length	48"	1219.2 mm
Width	40"	1016 mm
Weight	960 lbs	435.45 kg
Height	47.5"	1206.5 mm

**RB-1100 DETACHED ANCHOR DIMENSIONS**

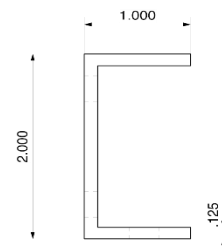
**RB-1100 CERTIFICATIONS**

Length	42"	1066.8 mm
Width	8.5"	215.9 mm
Weight	18 lbs.	8.2 kg
Height	3 "	76.2 mm

UL MECHANICAL	US & CA 2703	<b>E353639</b>
UL ELECTRICAL	US & CA 2703	<b>E353639</b>
UL FIRE TYPE I	US & CA 2703	<b>E353639</b>
UL FIRE TYPE 2	US & CA 2703	<b>E353639</b>



1 PANEL RAIL EXTENSION



RAIL SECTION



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**SPATIAL DIMENSIONS**

**FINISH**

Rafter Spacing	12", 16", 24"		Textured Black Powder Coat	1-3 mm
PV Panel Width	38.66" - 39.37"	982-1000mm		
Panel Thickness	1.22"-1.73"	31-45 mm		

**PLACEMENT**

**SNOW LOAD/ WIND ZONE CAPACITY**

Portrait	YES		<b>24"</b>	
Stagger Anchor Bases	YES		Wind Zone	190 mph.
Cantilever up to 16"	YES		Snow Load	120 lbs.

**MATERIALS INCLUDED**

**MATERIALS**

Rail Assembly with Panel Clamps	1 unit, 2 attached Panel Clamps		Steel	AR36-GS120	12 Gauge
Anchor Bases/ Feet	2		Aluminum	T6	
Mechanical Flashing	2				
Lag Bolts	2				
Washers	4				
Cross Brace/ Inverter Bolt	2				
Zip Tie	1				



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#### ***Product Description***

The RB-1100 is UL rated 2703; integrated structural & electrical grounding holding one solar panel in portrait position. It is self-aligning, self-squaring, and designed to be installed quickly. The RAQ in A Box technology has" vastly reduced installation times" by a proven factor of 76%(NREL). A patented mounting system that unfolds from a compact shipping state. Providing pre-positioned anchoring hardware and it universal mounts to the majority of 60 or 72 cell Solar Panels, on the market today.

Up to 18, 1 Panel RAQ's can be connected together in a single row, using only 1 single grounding point. This unit is used in conjunction with RAQ in a BOX A to start the row. RAQ in a Box A can also be used as for a stand-alone unit. The RAQ technology has been designed for rafter spacing of 12", 16", 24" without any modifications. The 1 Panel RAQ is rated for 190mph winds and 120lbs snow loads with roof anchor points at 24"

#### ***Mechanical Characteristics***

Lag bolts provided 5/16 x 4.5 18-8, Stainless Steel 100--- 125,000 psi nominal

#### ***Structural Joints***

All joining connections points are UL rated for structural, mechanical and electrical; allowing anchor location adjustments in the field.

#### ***Integrated Grounding***

All connection points are UL rated for grounding. Only one grounding point on the stand- alone unit or on a single row is needed. Grounding lugs are available for purchase in the Start Bracket Kit. The grounding lug provided in the start bracket kit will also enable you to ground to any additional rows, using a 10-gauge copper wire; which will ground the entire unit. When using an inverter that requires grounding please follow manufactures suggestions. A stainless steel "Type 23" self-tapping bolt is provided for each inverter connection point, to mount inverter.

#### ***Adjustable Anchor Points***

Each anchor of the racking is adjustable in height 1.5" to its connection to the rail to allow for variances in levels of the roof. This allows the installation of a flat array accounting for condition of roof surface

#### ***Adjustable leg spacing***

While the anchors of the racking are preset at 24" rafter spacing, they can be adjusted to 12", 16" and 24", spacing. Each connection point of anchor to rail allows a 3" tolerance for rafter misalignment. In the event of a misaligned rafter of greater than 3" the anchor can be removed and a hole can be drilled anywhere in the panel rail with the use of cold-rolled drill bit.

#### ***Adjustable panel clamp locations***

Mounting position for all the panel clamps, have a 3" range of adjustment for variable width of solar panels. See installation instructions for details.

#### ***Adjustable panel spacers***

Each panel clamp is adjustable by rotating it 90 degrees, this spacing between panels to be adjusted to compensate for panel width changes

#### ***Bifold type cross brace***

The Bi-Fold squaring arm requires an additional "Type 23" self- tapping bolt which is provided to secure the unit square

#### ***Suggested 3rd party providers of***

S5 or common metal roof clamps  
Tile roof clamps  
OMG Flat roof connections

#### ***Suggested to use in conjunction with***

The Inverter-BDM-250  
The Panel-OPT 280-60-4-100

