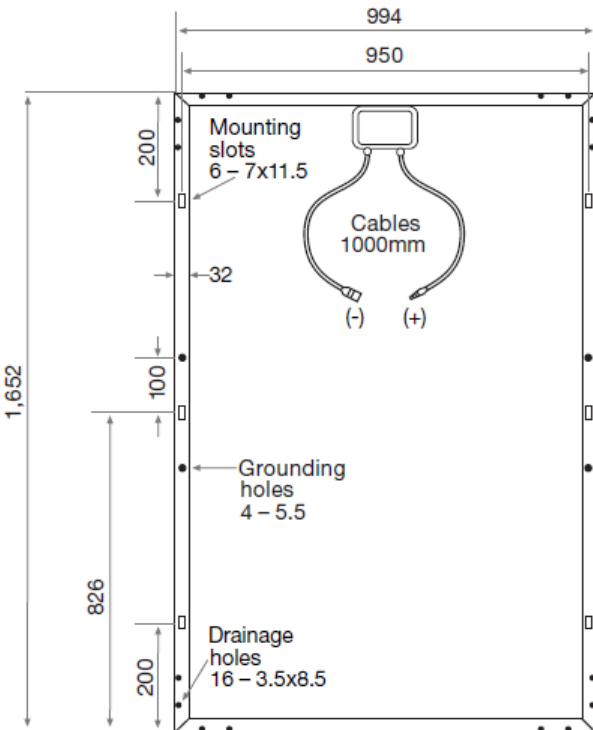


## SUNFIND 3.92kW Grid Tie System

With the ever rising cost of energy, SUNFIND Grid Tie Systems provide you the opportunity to lock in your energy prices while providing tremendous savings over the life to the system. In addition, a SUNFIND Grid Tie PV System will give you the peace of mind knowing that your energy requirements are being supplied by the most advanced, highest quality solar PV system on the market at the most competitive price possible. We have carefully designed and integrated all components to ensure a reliable, safe, and code compliant Grid Tie PV system that will provide clean energy for decades to come.

### Solar Modules: Conergy PH 245: 245W, 60 Cell Crystalline Modules

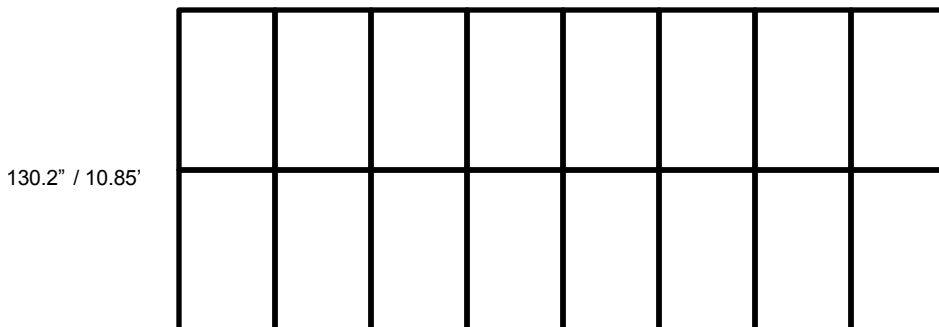
Conergy, a leading PV manufacture born in Germany, provides industry leady PV modules worldwide. The SUNFIND GT3.9 System includes 16 Conergy 245W Crystalline Modules.



Module dimensions (L x W x H)	1652 x 994 x 45mm / 65.0 x 39.1 x 1.8 in
Cell dimensions	156 x 156 mm/6.14 x 6.14 in
Number of cells	60
Module weight	20kg/44.1lb
Maximum load	5400Pa/113psf
Glass	3.2mm tempered
Junction box	IP65 Class
Cable	1000mm/39.4 in, 4mm <sup>2</sup> 12AWG PV wire (UL4703)
Connector	MC4 Compatible
<b>Certifications</b>	
Operating certifications	UL1703 (USA and Canada), IEC 61215 Ed.2
Fire safety classification	Class C
<b>Warranty</b>	
Material and workmanship warranty	10 years
Power warranty 1	90%/10 years
Power warranty 2	80%/25 years

All dimensions in mm

### 3.92 kW PV Array



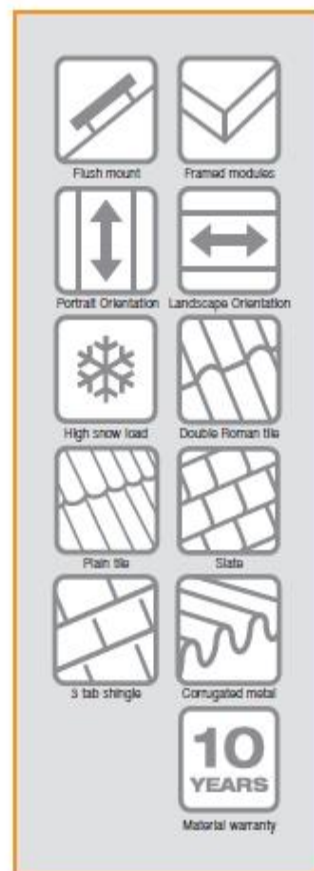
316.95" / 26.41'

Total Weight: ~ 1,110 lbs

Weight Distribution: 3.84 lbs / square foot. Weight is spread over 286.5 sq/ft, which makes for a light foot print

The Conergy SunTop is a revolutionary flush mount PV module mounting system. The system's unique base rail and Quickstone and Telescope technologies enable significantly

faster, easier installations. While new to the US market, Conergy SunTop has enjoyed 10 years of successful installations worldwide.



**Elegant Simplicity.** Conergy SunTop offers an elegant yet simple installation solution which can be mounted easily on any pitched roof with almost any kind of roof material.

**Significant Savings.** Conergy SunTop's unique engineering and high level of pre-assembly reduces installation time dramatically. Additionally, with only five rail lengths and the adjustable telescoping end piece, Conergy SunTop reduces shipping, handling and inventory costs as well.

**Code compliant design.** The web-based Certified Sizing Tool eases compliance with the UBC, CBC and IBC building codes by eliminating manual calculations. Simply enter the appropriate wind and snow load parameters for your site, and the Tool provides the required roof attachment frequency. The Tool also outputs the precise bill of materials needed for your installation.

**Adjustable rail length.** The Telescope technology eliminates the need to cut rail on the job site, while enabling precise module installations.

**Extensive module compatibility.** Conergy SunTop is compatible with nearly every framed PV module available in the US.

**Excellent adaptability.** The optional vertical extension plates make it easy to level the PV array despite roof irregularities.

**Guaranteed durability.** Conergy SunTop comes with a 10 year limited product warranty.

## OPTIONAL FLASHING SYSTEM FOR MOUNT

### Classic Composition Mount

Model QMSC

#### PARTS AND MATERIALS

Each mount kit (12 per box) includes:

- > Cast aluminum mounting block (2-1/4" L x 1-1/4" W x 1-1/4" H) bonded with .05" thick, 12" x 12" aluminum flashing
- > Hanger bolt, 5/16" x 6" (1-1/4" machine, 1-3/4" shank, 3" lag)
- > Stainless steel and EPDM rubber sealing washer, 3/4" x 5/16"
- > Two 5/16" hex nuts
- > EPDM sealing washer with 60 Durometer hardness
- > Stainless steel flat washer, 1" x 5/16"



#### SPECIFICATIONS

<b>Flashing size</b>	12" x 12"
<b>Pullout/shear</b>	3934 lbs. average pullout (Douglas fir); 4365 lbs. average shear
<b>Tools needed for installation</b>	<ul style="list-style-type: none"> <li>&gt; Tape measure</li> <li>&gt; Roofers bar/shingle ripper</li> <li>&gt; Chalk line</li> <li>&gt; Stud finder</li> <li>&gt; Caulking gun</li> <li>&gt; Appropriate sealant</li> <li>&gt; Drill with 1/4" bit</li> <li>&gt; Drill or impact gun with deep 1/2" socket</li> </ul>
<b>Applicable roof types</b>	Standard and high-definition composition and wood shingle roofs with 5" to 5/12" courses
<b>Available finishes</b>	> Aluminum mill

**NEW Enphase M215 Micro Inverter**



The Enphase Energy Microinverter System improves energy harvest, increases reliability, and dramatically simplifies design, installation and management of solar power systems. The Enphase System includes the microinverter, the Envoy Communications Gateway, and Enlighten, Enphase's monitoring and analysis software.

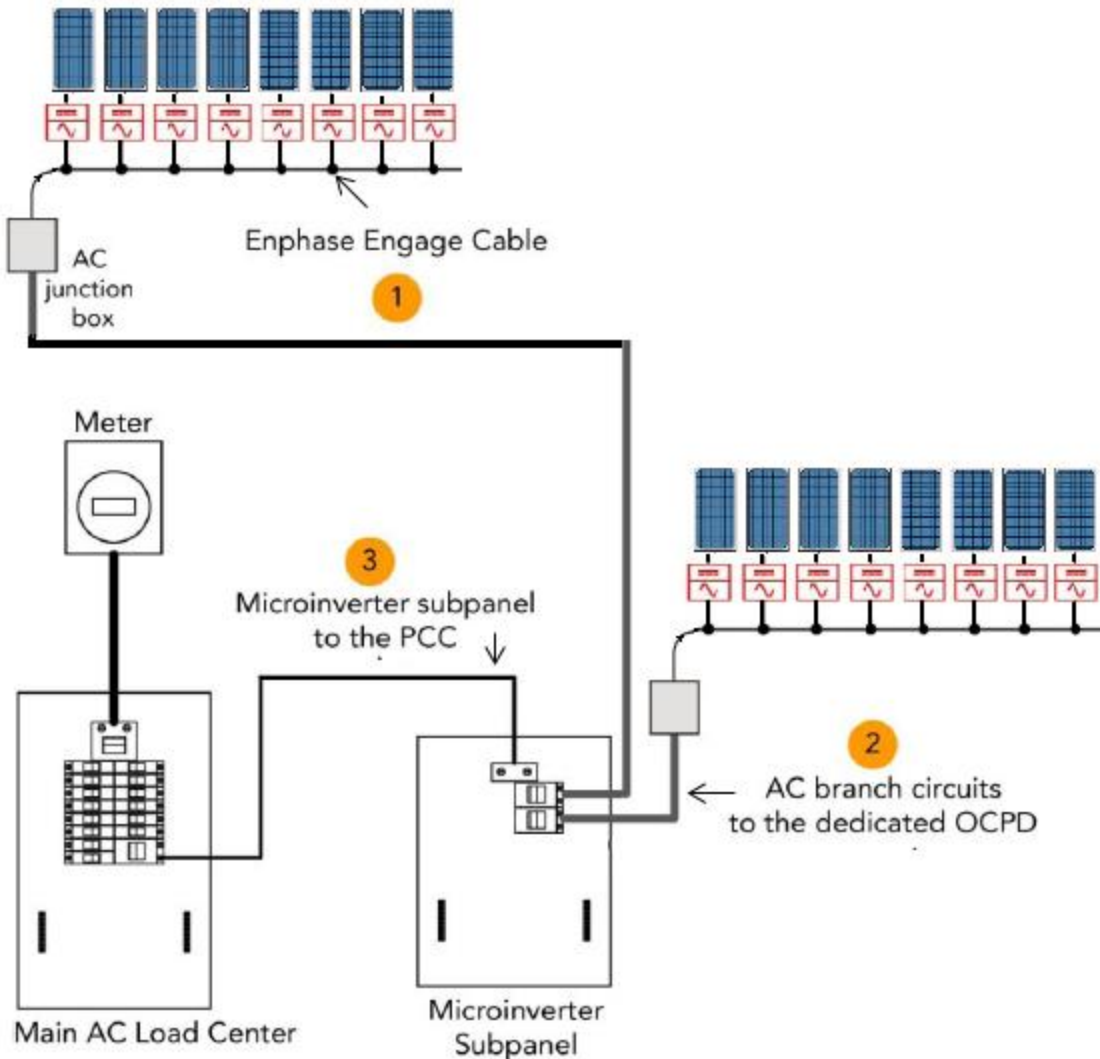
- PRODUCTIVE** [
  - Maximum energy production
  - Resilient to dust, debris and shading
  - Performance monitoring per module
- RELIABLE** [
  - System availability greater than 99.8%
  - No single point of system failure
- SMART** [
  - Quick & simple design, installation and management
  - 24/7 monitoring and analysis
- SAFE** [
  - Low voltage DC
  - Reduced fire risk



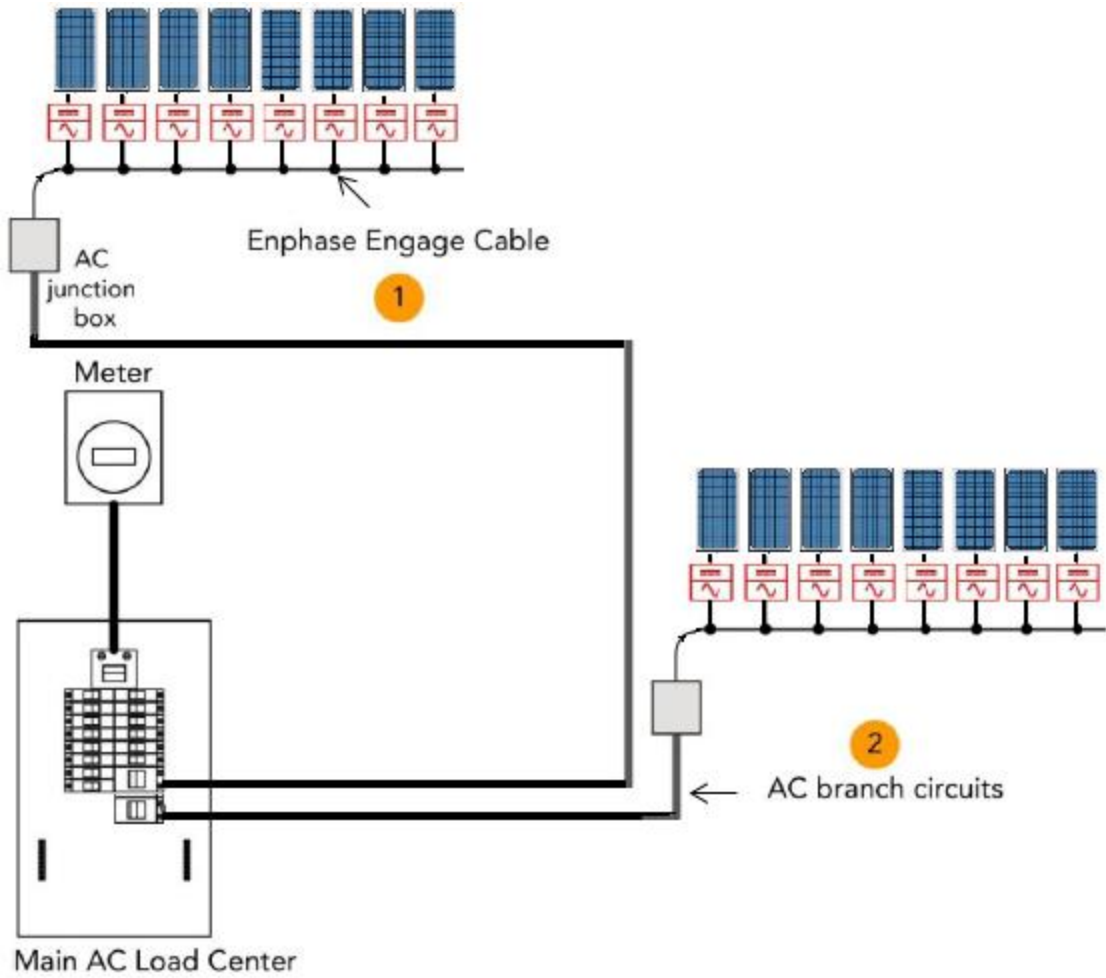
## Enphase M215 Installation Notes

Proper system configuration and installation is very important when it comes an efficient and reliable PV system installation. Sunfind Solar Products has specifically engineered each system to enable the most effective installation possible.

### Enphase M215 configuration – Option 1



## Enphase M215 configuration – Option 2



## Technical Notes

To ensure proper operation, it is very important to ensure the total voltage drop (voltage rise from the first inverter in the string to the Point of Common Coupling (PCC) is no more than 2%. This ensures the inverter will operate as required and not shut down to an “over voltage” situation.

1. Voltage Rise within Engage Cable: 0.46VAC / Percentage: 0.19 / Current: 7.17A
2. AC Branch circuits are 20A. Require a 20A, dual pole breaker.
3. The AC junction box is located on the rail at the end of the last module.
4. It is now important to figure out the total voltage drop from the AC junction box to the Main AC Load Centre. This cannot exceed 1.81% @ 7.17A for each branch circuit or 14.33A for the home wire run from the sub-panel to the main AC load panel.

Sunfind Solar Products is able to provide these calculations, provided we are provided with the length of cable runs required to complete the installation.

REMAINING SPACE IS RESERVED FOR NOTES / CALCULATIONS

### SUNFIND GT 3.9

- 3.92kW Array: 16 x 245W PV modules
- SunTop Flush Mount rack will required hardware and grounding clips
- 16 x M215 Enphase Micro Inverter with required cabling: 240VAC @ 60Hz
- Capable of producing 4,286 kWh per year @ 52 degree latitude
- Based on current electricity rates, with 2.5% yearly inflation in utility rates, this system will save roughly \$21,900 gross over 32 years.
- In addition, PV systems add value. A 3.92kW system can add up to \$11,000 to a home's value.
- Cost of doing nothing: Over \$22,000 in utility costs over the next 32 years.



The first step to a successful PV system implementation is education. Not all PV systems are equal and overall system performance, cost and reliability will be determined by how successful all these components are integrated together. Our systems have undergone rigorous design and testing to ensure all the components, from the PV modules to the array racking, and the dozens of components in between, will integrate and operate as a reliable, efficient PV System. Sunfind Solar Products prides ourselves on providing industry leading PV systems , backed by our expertise, and supported by our goal of exceptional customer support.

For additional education material, product information and/or pricing, please contact a SUNFIND solar professional today.

Corporate Address:

SUNFIND SOLAR PRODUCTS  
14, 7459 Edgar Industrial Bend  
Red Deer, AB T4P 3Z5

Monday-Thursday  
7:30am - 4:00pm MST

Friday  
7:30am-3:00pm MST

Location: Please stop by and visit us.

**Tel: +1.403.343.6434**

**Fax: +1.403.343.6455**