



Make the Connection.
Power the Future.

Change Order Form

Change Order Number:	9182018
Change Order Date:	9/18/2018
Original Contract Date:	8/23/2018

Customer

Name:	Ellen Silver(Highfield)
Mailing Address:	11 Chesley Rd.
City, State, Zip	Newton Ctr. MA, 02459
Phone:	617-584-0839
E-Mail:	info@chesleyroadbedandbreakfast.com

Project Description

Project Name:	Silver(Highfield) - PV
Installation Site:	11 Chesley Rd.
City, State, Zip	Newton Ctr. MA, 02459
Notes:	Adding 2 panels

We, the Contractor and the Customer, agree to make change(s) as specified below for:

Previous Contract Amount including all previous Change Orders:

Revised Contract Amount:

\$2,934.40

\$17,607.60

\$20,542.00

With the submission of this Change Order, the contractor requests zero (0) days extension to the project completion date. No work shall commence on the work covered by this Change Order until it is received by the contractor properly executed by the customer.

Summary of Changes

Upon completing of the engineering survey, it was determined that 2 additional panels can fit, totaling 14, which will cover ~35% of the customer's annual electric bill. The additional cost will be added to the final payment due upon Permission to Operate.

Updated Production and Demand – Before Shade – 6,434 kWh's, after shade 5,791 kWh's, demand for site – 16,641 kwh.

Accepted by:

The price and conditions for this Change Order are satisfactory and are hereby accepted. This Change Order, upon its execution, shall become part of and conform to the terms and conditions of the existing contract as identified above.

Ellen Silver

Customer (print name)

System Owner

Title (if applicable)

Ellen Silver

Customer Signature

Sept. 19, 2018

Date

Matthew Honkonen

Sunlight Solar Representative (print name)

Sales Manager /Lead System Designer

Title

Matthew Honkonen

Sunlight Solar Representative Signature

09/18/2018

Date



CUSTOMER PURCHASE AGREEMENT (CPA)
Residential
Solar Photovoltaic System

Today's Date 23-Aug-18
Est. Valid To 22-Oct-18
SSE Contact Matthew Honkonen
CPA Type Agreement

CUSTOMER INFORMATION

Customer Legal Name	Ellen Silver		
Customer Address	11 Chesley Rd.		
City, State and Zip	Newton Center	MA	02459
Installation Address	11 Chesley Rd.		
City, State and Zip	Newton Center	MA	02459
Contact Info	Home	Cell	Office
	617-584-0839	0	0
			Email
			info@chesleyroadbedandbreakfast.com

Notes: Agreement is pending and a full Engineering Survey.

MATERIAL DETAIL

	Manufacturer	Model	Quantity
Solar Panels*	LG	365W	12
Inverter**	Enphase	IQ6+	12
Rack Detail	Snap N Rack	Series 100, L-Feet	
Monitoring Service	Enphase	Enlighten	
SREC Reporting Service	Enphase	PowerDash 10 Year Auto-Reporting	

*Listed to UL Standards, LG 25-year warranty. **Listed to UL Standards, Enphase 25-year warranty.

ENERGY CONTRIBUTION TABLE

Total Solar Array Wattage	4,380
Total Solar Resource Fraction	88%
Expected Annual Energy Production of System kWh in Year 1*	4,963

*Yearly and monthly total energy production estimates can vary 10-20% due to seasonal weather conditions. Actual solar energy production will be logged using a utility-grade solar kWh meter installed on the output of the inverter. SSE will guarantee 90% of FYP for 2 years following date of interconnection, underproduction will be refunded at current price per kWh from utility provider.

PRICE INFORMATION (Includes Sales Tax, if any)

Solar Panels and Shipping	\$6,690.89
Inverter(s) and Shipping	\$2,641.14
Balance of Systems: (racks, solar meter and base, wire, conduit, fusing, breakers, disconnects) and Labor	\$1,760.76
Monitoring, Permits, and Interconnection	\$5,282.28
Additional Costs	\$1,232.53
Total Installation Cost	\$0.00
	\$17,607.60

CUSTOMER PAYMENT SCHEDULE

10% Upon Contract Signing*	Initial Here	\$1,760.76
30% Upon Pre-Interconnection Approval**	Initial Here	\$5,282.28
50% Upon Delivery of Materials(Def. 7, see below)**	Initial Here	\$8,803.80
10% Upon Permission to Operate**	Initial Here	\$1,760.76

*Refundable (see Term and Termination below) **If completing this term using a credit card, a 4% transaction fee per payment term will be applied.

ADDITIONAL NOTES

By signing this Agreement Customer has read and accepts attached legal provisions. Quote must be verified in the field. Cost applies to Individuals who are eligible for all tax credits and incentives. SSE, Inc provides a 10 year labor warranty.

MASSACHUSETTS IMPROVEMENT REQUIREMENTS

1. Notice of Cancellation: 8/26/2018
2. Estimated Installation Date: Within 90 Days
3. Estimated Completion of Installation Date: Within 90 days

CONTINUED NEXT PAGE

PAGE 1 OF 4

LEGAL PROVISIONS

You (the "Customer") are entering into this purchase of a solar photovoltaic system (the "Solar Facility") with Sunlight Solar Energy, Inc. (the "Contractor"). You represent that you are at least eighteen (18) years of age and that you are the owner of the house, garage, property or remote job site where the Solar Facility is to be installed (the "Property"). You further represent that every person or entity with an ownership interest in the Property has agreed to be bound by this Customer Purchase Agreement (the "Agreement").

1. Licensed and Bonded. Contractor is fully licensed, insured and bonded to cover any theft from or damage to the Property that is the obvious responsibility of Contractor's employees or subcontractors.

2. Estimates. Energy production estimates, yearly energy savings, monies from Renewable Energy Credits, tax credits/deductions and any other financial estimates or statements are estimates only and are based on factors external to and not controlled by Contractor.

3. Possession of Materials. Upon delivery of materials, installed or uninstalled to the Property, such materials become the sole responsibility of the Customer. Customer is responsible to make sure that all garages, property, and structures that house installation materials are locked and secure after Contractor has left the jobsite. Contractor shall not be liable for any theft or damage of materials after their delivery.

4. Access to Facilities. Contractor employees shall be afforded access to a bathroom at all times. See Provision 1. Customer shall grant free access to work areas for work persons and vehicles and shall allow areas for storage of materials and rubbish. During inclement weather Customer shall afford a large dry area for materials. Customer agrees to keep driveways clear and available for movement and parking of trucks or work vehicles during normal hours. Contractor and work persons shall not be expected to keep gates closed for animals or children or provide work area security. Customer is expected to brief all family members, especially children, of keeping away from any areas that Contractor is expected to work at or above and out of and away from work vehicles or designated work areas.

5. Cooperation. Customer shall cooperate and facilitate fully and promptly the purchase and procurement of any permits and approvals as well as the post installation inspection process of the local building department, utility company or other jurisdiction for the Solar Facility. This means being available during business hours of weekdays to meet building, utility, or other relevant personnel.

6. Commencement and Completion of Work. Contractor shall have substantially commenced work when any racks or foundations of mounting system have begun. Malfunction of or minor damage to installed equipment, or minor blemishes in materials shall not constitute grounds to withhold payment for substantial completion.

7. Delivery of Materials. The Delivery of Materials is defined as the receipt of all hardware that is specified herein. Contractor shall have substantially completed work when all significant materials have been delivered. Delivery of Materials does not include local building, utility inspections, customer walk through or any final installation of minor components or labeling. Any remaining electrical inspections are covered under Contractor's labor warranty.

8. Timeliness of Installation. Contractor shall make best efforts for a timely installation. Contractor shall not be held liable for any delay in installation due to acts of God, unusually severe weather, dangerous installation conditions as determined by Contractor, unusually long permitting processes or delays caused by Customer. No payment shall be delayed or withheld for lack of suitable weather in which to test any part of the equipment.

9. Financing. If all or any part of the Agreement is to be financed through a financial institution, Customer agrees to authorize lender to pay directly to Contractor the net proceeds of any such loan in payments as mutually agreed between Customer and Contractor. Customer will make, execute and deliver all forms required by lenders for such purposes.

10. Finance Charges. If payments are not received relative to the terms of the Agreement, Contractor may discontinue work until entire balance has been paid. The unpaid balance will be subject to a finance charge of 12% per year.

11. Title to Equipment and Right to Remove. Title, but not liability relative to theft and damage, to the equipment and materials supplied by the Contractor will remain with Contractor until all sums due the Contractor, including Energy Fund rebate payment forms have been signed or paid to Contractor. Contractor may, at its option, remove any portion of the materials equivalent in value to any payment then in default without limiting Contractor's right herein. Including all permit fees, installation labor used and applicable reasonable travel and administration expenses.

12. Insurance. Customer shall provide adequate insurance covering the value of all services, labor, materials and goods involved in this work from loss due to fire, vandalism or theft.

13. Limitation of Liability. Contractor shall not be liable for any incidental, consequential or special damages or for economic loss or for loss profits or income or loss of use to Customer. In no event shall Contractor be liable in an amount exceeding the price to be paid by Customer in this Agreement.

CONTINUED NEXT PAGE

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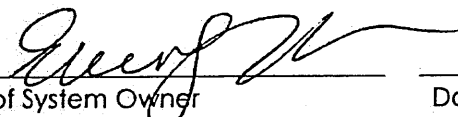
**Make the Connection.
Power the Future.**

Auto-Reporting Policy Acknowledgement Form

I, Ellen Silver, understand that PowerDash auto-reporting has been included as part of my solar facility and is included in the price quoted on my Customer Purchase Agreement. I understand that reporting to the Production Tracking System, either manually or via a PowerDash device, is the sole responsibility of the system owner.

It has been communicated to me by System Designer Matthew Honkonen that Sunlight Solar Energy, Inc. does not monitor my PowerDash device and that the responsibility for ensuring that the PowerDash remains online and reports successfully to the Production Tracking Systems rests solely with the system owner. Sunlight Solar Energy is not liable for any unreported production or lost Solar Renewable Energy Credits (SRECs).

In the event that a PowerDash automatic reporting device goes offline and is brought to the attention of Sunlight Solar Energy, S.S.E. will work with the customer to schedule a service call and bring the PowerDash back online. If the offline PowerDash is due to component failure, the service call and all associated parts will be covered by Sunlight Solar Energy's 10-year warranty and will not be billed. If it is determined by Sunlight Solar that the offline PowerDash is caused by the system owner unplugging system components – the service call is not covered by the 10-year S.S.E. warranty and will be charged a service fee.

 _____
Signature of System Owner Date 8-23-18

LEGAL PROVISIONS (continued)

14. Pre-Existing Condition. Customer acknowledges that proper operation of the Solar Facility may be dependent upon Customer's existing equipment and Contractor shall have no liability for equipment not purchased hereunder. This includes the condition of the main service panel, existing utility meter, placement of existing utility meter, and conditions required by local utility for placement of utility meter due to the installation of the Solar Facility. While Contractor will exercise all due care, Contractor will not be responsible for pre-existing conditions of any roof, meter or utility service or for damages or problems arising from such pre-existing conditions which may be aggravated by normal material handling procedures on the roof.

15. Entire Agreement. The Agreement and all other agreements, exhibits, and schedules referred to therein constitute(s) the final, complete and exclusive statement of the terms of the agreement between Customer and Contractor and supersede all prior verbal and contemporaneous understandings or agreements.

16. Term and Termination. The Agreement will become effective when both Customer and Contractor have signed the Agreement. If structural upgrades are deemed necessary by engineering firm, Customer has option to cancel agreement. First payment term will be refunded.

17. Modification of Agreement. The Agreement may be supplanted, amended or modified only by the mutual agreement of the parties. No supplement, amendment or modification of the Agreement shall be binding unless it is in writing, signed and dated by all parties. Due to the high demand for PV solar systems and the limited supply of key components (solar panels/inverters), Contractor cannot guarantee the availability of specific key items. Contractor will make every effort to provide comparable equipment. However, if there will be any change in total system wattage, Contractor and Customer agree to amend the Agreement in regards to installed price, rebate amount, buyer investment, energy and financial information accordingly.

18. Arbitration Clause. All disputes, controversies, or claims arising out of or relating to the Agreement shall be firstly submitted to binding arbitration in accordance with the applicable rules of the American Arbitration Association then in effect. In the event a party fails to proceed with arbitration, unsuccessfully challenges or fails to comply the arbitrator's award, the other party is entitled to costs of suit including a reasonable attorney's fee for having to compel arbitration or defend or enforce award.

19. MA Consumer Law. Law requires that any deposit or down-payment required by the contractor before work begins may not exceed the greater of (a) one-third of the total contract price or (b) the actual cost of any special equipment or custom made material which must be special ordered in advance to meet the completion schedule. Special items include solar panels, inverters, and shipping, as quoted in line 1 of the Price Information section of this agreement.

20. Permission to Operate. Permission to operate is generated from the utility company. This document gives SSE permission to connect the newly installed solar system to be connected to the grid.

21. Notice of Cancellation. You the buyer may cancel this transaction at any time prior to midnight on the third business day after the date of signature on this contract without any penalty or obligation.

SIGNATURES

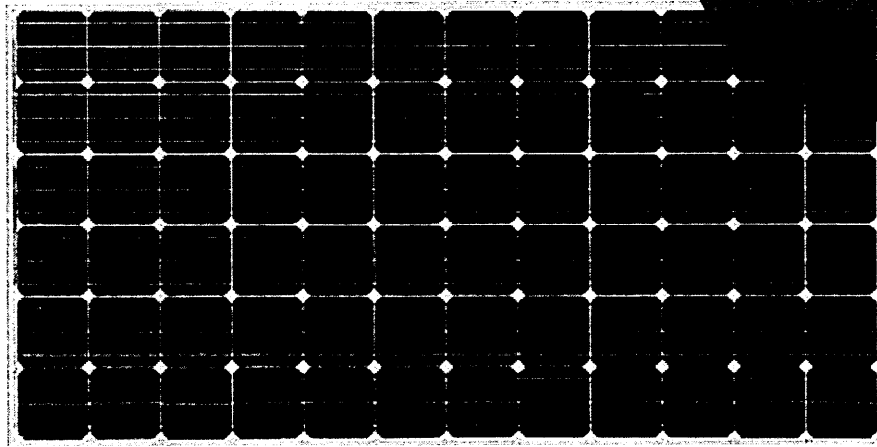
Customer: 	Date:
Sunlight Solar Energy, Inc.: <i>Matthew Honkonen</i>	Date: 08/23/2018

PHOTO RELEASE STATEMENT

"It is our mission to educate customers, empowering them to make smart decisions. Some of these educational efforts involve marketing materials such as our website, flyers, and Power Point presentations. Since a picture is worth a thousand words, we appreciate your helping us achieve our mission via pictures of you and/or your home."

I authorize the use of photos of me and/or my system for Sunlight Solar Energy marketing purposes _____

PAGE 3 OF 4



LG NeON[®] 72cell

LG365N2W-B3

72 cell

Introducing LG NeON[®] 72 cell module series, which uses highly efficient n-type materials, an elaborate process control adopting a semiconductor processing solution and a double-sided structure. Our R&D concentrates on developing a product that is not only efficient, but strives to increase practical value for customers.



Enhanced Performance Warranty

LG NeON[®] 72 cell has an enhanced performance warranty. The annual degradation has fallen from -0.7%/yr to -0.6%/yr. Even after 25 years, the cell guarantees 2.4%p more output than the previous LG NeON[®] modules.



N-Type Material

LG NeON[®] 72 cell uses n-type cells, boasting higher mobility of electric charge, resulting in higher generation efficiency.



Better Performance on a Sunny Day

LG NeON[®] 72 cell now performs better on a sunny days thanks to its improved temperature coefficient.



High Power Output

Compared with previous models, the LG NeON[®] 72 cell has been designed to significantly enhance its output efficiency making it efficient even in limited space.



Double-Sided Cell Structure

The rear of the cell used in LG NeON[®] 72 cell is designed to contribute to generation; the light beam reflected from the rear of the module is reabsorbed to generate a great amount of additional power.



Near Zero LID (Light Induced Degradation)

The n-type cells used in LG NeON[®] 72 cell have almost no boron, which may cause the initial efficiency to drop, leading to less LID.

About LG Electronics

LG Electronics is a global player who has been committed to expanding its operations with the solar market. The company first embarked on a solar energy source research programs in 1985, supported by LG Group's vast experience in the semi-conductor, LCD, chemistry, and materials industries. In 2010, LG Solar successfully released its first Mono X[®] series to the market, which is now available in 32 countries. The LG NeON[®] (previous Mono X[®] NeON) and the LG NeON[®] 2 won the "Intersolar Award" in 2013 and 2015, which demonstrates LG Solar's lead, innovation and commitment to the industry.

Mechanical Properties

Cells	6 x 12
Cell Vendor	LG
Cell Type	Monocrystalline / N-type
Cell Dimensions	156.75 x 156.75 mm / 6 inches
# of Busbar	3
Dimensions (L x W x H)	1960 x 1000 x 46 mm 77.17 x 39.37 x 1.81 inch
Front Load	60 psf
Rear Load	60 psf
Weight	20.3 ± 0.5 kg / 44.75 ± 1.1 lbs
Connector Type	MC4, IP67
Junction Box	IP67 with 3 bypass diodes
Cable	PV wire 12 AWG (4.0mm ²) conductor
Length of Cables	2 x 1200 mm / 2 x 47.24 inch
Glass	High Transmission Tempered Glass
Frame	Anodized Aluminium

Certifications and Warranty

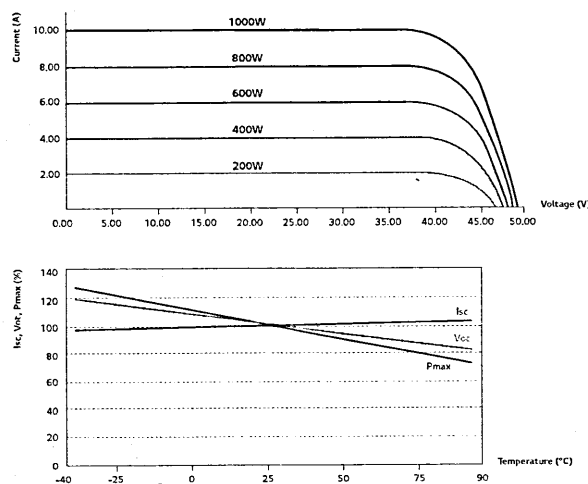
Certifications	IEC 62716 (Ammonia Test) IEC 61701 (Salt Mist Corrosion Test) ISO 9001 UL 1703
Module Fire Performance (USA)	Type 2 (UL 1703)
Fire Rating (for CANADA)	Class C (ULC/ORD C1703)
Product Warranty	12 years
Output Warranty of Pmax	Linear warranty*

* 1) 1st year: 98%, 2) After 2nd year: 0.6% annual degradation, 3) 83.6% for 25 years

Temperature Characteristics

NOCT	45 ± 2 °C
Pmax	-0.41 %/°C
Voc	-0.30 %/°C
Isc	0.04 %/°C

Characteristic Curves



Electrical Properties (STC *)

Module Type	365 W
MPP Voltage (Vmpp)	38.6
MPP Current (Impp)	9.46
Open Circuit Voltage (Voc)	48.4
Short Circuit Current (Isc)	9.89
Module Efficiency (%)	18.6
Operating Temperature (°C)	-40 ~ +90
Maximum System Voltage (V)	1000
Maximum Series Fuse Rating (A)	20
Power Tolerance (%)	0 ~ +3

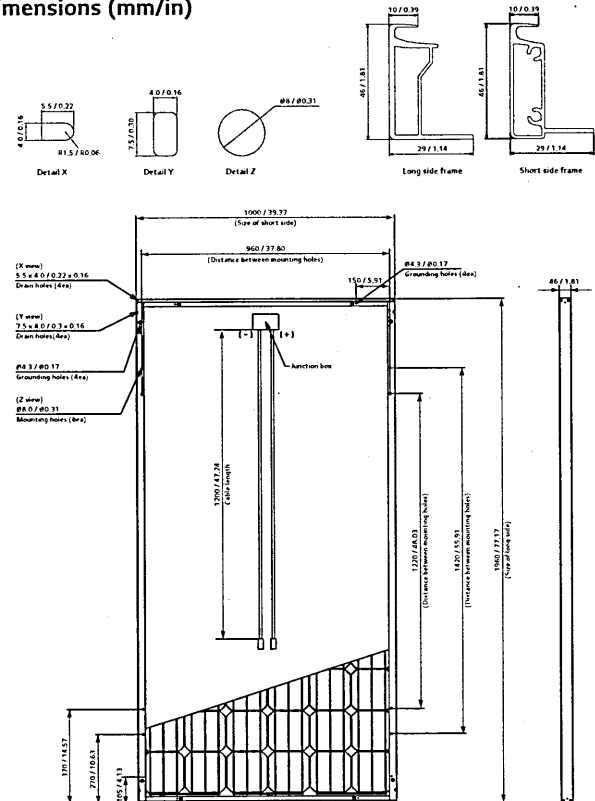
* STC (Standard Test Condition) Irradiance 1000 W/m², Module Temperature 25 °C, AM 1.5
* The nameplate power output is measured and determined by LG Electronics at its sole and absolute discretion.
* The typical change in module efficiency at 200 W/m² in relation to 1000 W/m² is -2.0%.

Electrical Properties (NOCT*)

Module Type	365 W
Maximum Power (Pmax)	267
MPP Voltage (Vmpp)	35.3
MPP Current (Impp)	7.55
Open Circuit Voltage (Voc)	44.9
Short Circuit Current (Isc)	7.98

* NOCT (Nominal Operating Cell Temperature) Irradiance 800 W/m², ambient temperature 20 °C, wind speed 1 m/s

Dimensions (mm/in)



* The distance between the center of the mounting/grounding holes.



North America Solar Business Team
LG Electronics U.S.A. Inc
1000 Sylvan Ave, Englewood Cliffs, NJ 07632

Contact: lg.solar@lge.com
www.lgsolarusa.com

Product specifications are subject to change without notice.
D5-N1-72-C-G-P-EN-50724

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01/02/2015

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Series 100 UL & Series 200 UL

UL 2703: Grounding and Bonding Compliance

At SnapNrack we have expanded our product line with our new Series 100 UL and Series 200 UL. Both systems are fully listed to the UL 2703 Standard for Grounding and Bonding. With the UL listing, all system components have been certified by UL for electrical continuity, eliminating the need for additional grounding hardware. If there ever was the situation where a live conductor contacted a metallic component of the mounting system or array, the array would remain unenergized.

New Features of Series 100 UL and Series 200 UL

Bonding pins are included in product assemblies including module clamps and rail splices, eliminating the need for bonding washers or splice jumpers.

SnapNrack grounding lug is a fully custom solution for grounding the completed system. Only one lug is required per individual row of modules (not per rail). The lug is secured with a single 5/16" bolt just like every other component in the system and requires no drilling of the rails.

A key component of the listing is our new bonding channel nuts, which provide electrical continuity into our anodized rails.

Mill finish specification on key components such as standoffs and metal roof seam clamps.



Benefits of Series 100 UL and Series 200 UL

The UL 2703 Listing is a huge benefit to distributors and installers of SnapNrack product. A few benefits include:

A Fully Certified System

The entire system, including all components, is now bonded together. In other mounting systems on the market, some clamps, roof anchors, flashings, etc. aren't truly bonded to ground, and therefore not fully code compliant.

Overall Reduction in Material Costs

With the UL Listed product, we have added features into our components that ensure an adequate bonding path, and in turn this has eliminated the need for grounding lugs and washers at each module, and bonding jumpers between splices.

Dramatic Reduction in Labor

With the elimination of grounding and bonding jumpers on the array, installations should have a dramatic improvement in efficiency, reducing installations by 1 hr/kW or more.

Quality & Safety

SnapNrack installations using our UL product ensures that every metallic component on the system is bonded to ground the system

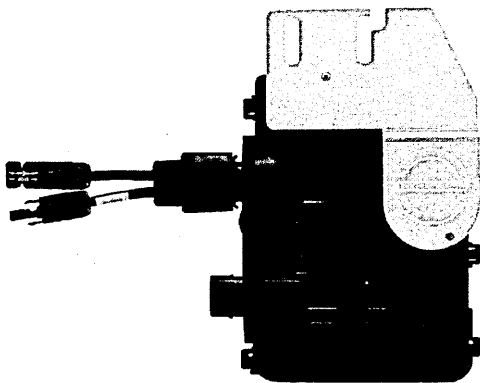
See below for a library of supporting documents to help assist with ordering and installing Series 100 UL and Series 200 UL.

Enphase IQ 6 and IQ 6+ Microinverters

Designed for higher powered modules, the smart grid-ready **Enphase IQ 6 Micro™** and **Enphase IQ 6+ Micro™** are built on the sixth-generation platform and achieve the highest efficiency for module-level power electronics and reduced cost per watt.

Part of the Enphase IQ System, the IQ 6 and IQ 6+ Micro integrate seamlessly with the Enphase IQ Envoy™, Enphase IQ Battery™, and the Enphase Enlighten™ monitoring and analysis software.

The IQ 6 and IQ 6+ Micro are very reliable as they have fewer parts and undergo over 1 million hours of testing. Enphase provides an industry-leading warranty of up to 25 years.



Easy to Install

- Lightweight
- Simple cable management
- Built-in rapid shutdown (NEC 2014)

Productive

- Optimized for high powered modules
- Supports 60 and 72-cell modules
- Maximizes energy production

Smart Grid Ready

- Complies with fixed power factor, voltage and frequency ride-through requirements
- Remotely updates to respond to changing grid requirements
- Configurable for varying grid profiles



To learn more about Enphase offerings, visit enphase.com



Enphase IQ 6 and IQ 6+ Microinverters

INPUT DATA (DC)	IQ6-60-2-US AND IQ6-60-5-US		IQ6PLUS-72-2-US AND IQ6PLUS-72-5-US	
Commonly used module pairings ¹	195 W - 330 W +		235 W - 400 W +	
Module compatibility	60-cell PV modules only		60-cell and 72-cell PV modules	
Maximum input DC voltage	48 V		62 V	
Peak power tracking voltage	27 V - 37 V		27 V - 45 V	
Operating range	16 V - 48 V		16 V - 62 V	
Min/Max start voltage	22 V / 48 V		22 V / 62 V	
Max DC short circuit current (module Isc)	15 A		15 A	
Overvoltage class DC port	II		II	
DC port backfeed under single fault	0 A		0 A	
PV array configuration	1 x 1 ungrounded array; No additional DC side protection required; AC side protection requires max 20A per branch circuit			
OUTPUT DATA (AC)	IQ6-60-2-US AND IQ6-60-5-US		IQ6PLUS-72-2-US AND IQ6PLUS-72-5-US	
Peak output power	240 VA		290 VA	
Maximum continuous output power	230 VA		280 VA	
Nominal voltage/range ²	240 V / 211-264 V	208 V (1Φ) / 183-229 V	240 V / 211-264 V	208 V (1Φ) / 183-229 V
Nominal output current	0.96 A	1.11 A	1.17 A	1.35 A
Nominal frequency	60 Hz		60 Hz	
Extended frequency range	47 - 68 Hz		47 - 68 Hz	
Power factor at rated power	1.0		1.0	
Maximum units per 20 A branch circuit	16 (240 VAC) 14 (single-phase 208 VAC)		13 (240 VAC) 11 (single-phase 208 VAC)	
Overvoltage class AC port	III		III	
AC port backfeed under single fault	0 A		0 A	
Power factor (adjustable)	0.7 leading ... 0.7 lagging		0.7 leading ... 0.7 lagging	
EFFICIENCY	@240 V	@208 V (1Φ)	@240 V	@208 V (1Φ)
CEC weighted efficiency	97.0 %	96.5 %	97.0 %	96.5 %
MECHANICAL DATA				
Ambient temperature range	-40°C to +65°C			
Relative humidity range	4% to 100% (condensing)			
Connector type	MC4 or Amphenol H4 UTX			
Dimensions (WxHxD)	219 mm x 191 mm x 37.9 mm (without bracket)			
Weight	1.5 kg (3.3 lbs)			
Cooling	Natural convection - No fans			
Approved for wet locations	Yes			
Pollution degree	PD3			
Environmental category / UV exposure rating	Outdoor - NEMA 250, type 6 (IP67)			
FEATURES				
Communication	Power line			
Monitoring	Enlighten Manager and MyEnlighten monitoring options Compatible with Enphase IQ Envoy			
Compliance	UL 62109-1, UL1741/IEEE1547, FCC Part 15 Class B, ICES-0003 Class B, CAN/CSA-C22.2 NO. 107.1-01 This product is UL Listed as PV Rapid Shut Down Equipment and conforms with NEC-2014 and NEC-2017 section 690.12 and C22.1-2015 Rule 64-218 Rapid Shutdown of PV Systems, for AC and DC conductors, when installed according manufacturer's instructions.			

1. No enforced DC/AC ratio. See the compatibility calculator at enphase.com/en-us/support/module-compatibility.

2. Nominal voltage range can be extended beyond nominal if required by the utility.

To learn more about Enphase offerings, visit enphase.com

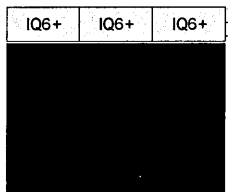
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2017-03-15



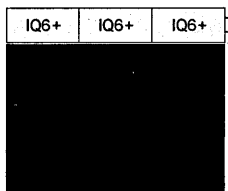
ELECTRICAL ONE – LINE DIAGRAM

*Enphase IQ6PLUS Micro-Inverter
mounted behind each panel
(equipped with integrated rapid
shutdown means per 690.12)

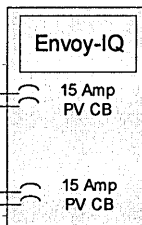
String 1 – 9 Panels
 $9 \times 1.17A \times 1.25 = 13.2A$



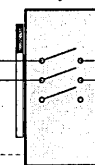
String 2 – 5 Panels
 $5 \times 1.17A \times 1.25 = 7.3A$



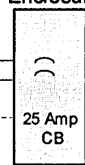
*AC
Combiner
Box w/
Envoy-IQ
Revenue
Grade Meter



* 30A non
fusible
disconnect w/
visible,
lockable
blade and
accessible to
utility 24/7

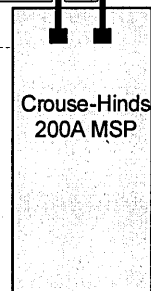
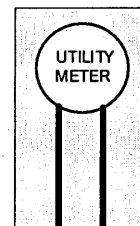


125A
Breaker
Enclosure



UTILITY
SERVICE

Meter#
1762601



GROUNDING
ELECTRODE



INSTALLER NOTES: Internal chase. Replacing meter socket.

WIRE SELECTION FOR DC AND AC CONDUCTORS

ROOF: IQ Series Trunk Cable
DC RUN: NA
GEC: #6 STRANDED
EGC: #6 THHN/THWN-2
AC RUN: #6 THHN/THWN-2

CONDUIT SIZING

1" PVC OUTDOOR
1" EMT INDOOR

TOTAL SYSTEM SIZE: $14 \times 365 = 5.11 \text{ KW}$

MODULE MANUFACTURER: LG
MODULE MODEL #: LG365Q1C-A5
OPEN-CIRCUIT VOLTAGE (V_{oc}): 42.8
OPERATING VOLTAGE (V_{mp}): 36.7
OPERATING CURRENT (I_{mp}): 9.95
SHORT-CIRCUIT CURRENT (I_{sc}): 10.8
MAXIMUM POWER (W): 365

*PV MODULE RATINGS @ STC

MICRO-INVERTER RATINGS

INVERTER MODEL: Enphase IQ6PLUS
MAX DC VOLT RATING (V): 62
MAX DC POWER (W): 400
MAX OUTPUT CURRENT (A) 1.17
MAX OUTPUT VOLTAGE (V) 264

SERVICE PANEL RATINGS

BUS AMP RATING(A): 200
SERVICE VOLTAGE(V): 240
MAIN AMP RATING(A): 200

AC DISCONNECT RATINGS

AMP RATING(A): 30
VOLTAGE RATING(V): 240
NEMA 3R

MASTER ELECTRICIAN SIGN-OFF

LABELING PER NEC 690.53

OPERATING VOLTAGE: 240V
OPERATING FREQUENCY: 60Hz
MAXIMUM POWER: 4.06kW (AC)
MAXIMUM CURRENT: 20.3A
OVERCURRENT PROTECTION: 25A



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102 Clematis, Ma, 01745
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HIC # 152314 LIC# 1169MR

Ellen Silver
11 Chlsea Road
Newton MA 02459
617-584-0839

Date

10/3/2018

Drawn By:

CDH

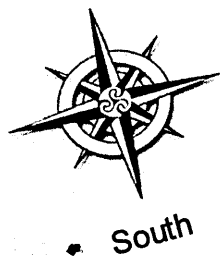
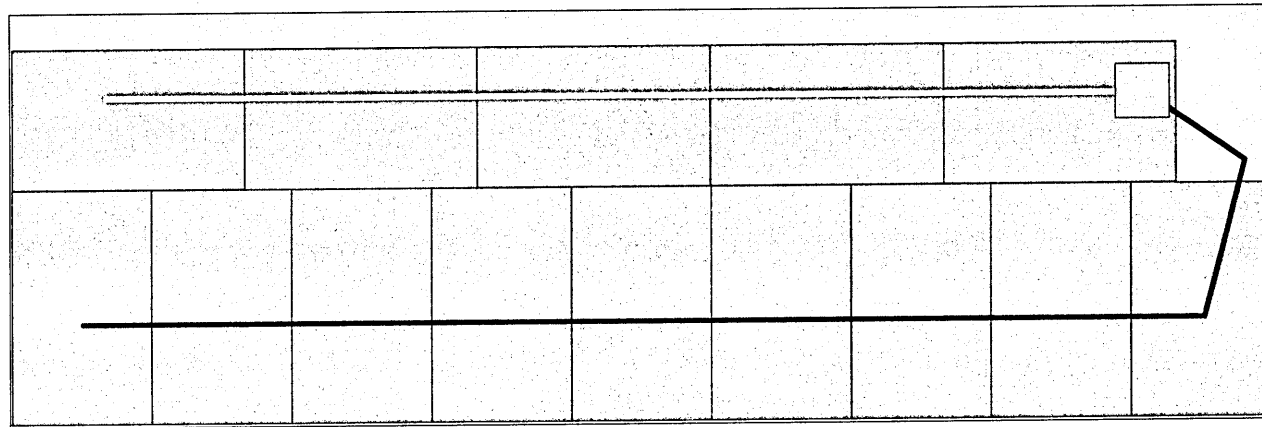
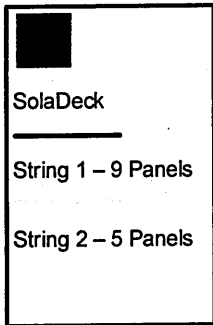
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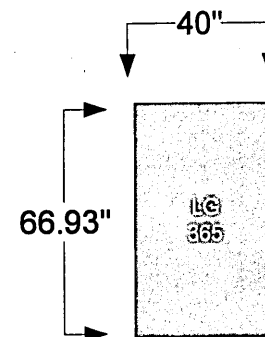
PV ARRAY DESIGN

VIEW	PANEL ORIENTATION (TRUE)	ROOF PITCH (DEGREES)	SCALE:
AERIAL - OVERHEAD	194°	24°	NTS



**(14) LG 365 watt mono solar panels mounted on (1)
 roof plane in portrait and landscape orientation
 **SnapNrack Series 100 racking
 **Ecofasten L-feet/flashing attachments

Rafters - 2x8" 20" OC



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SITE MAP

VIEW	PANEL ORIENTATION (TRUE)	ROOF PITCH (DEGREES)	SCALE:
AERIAL - OVERHEAD	194°	24°	NTS



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