PROPOSAL

For Procurement and Installation of a Solar Power System on the Roof of the Washington Engine Firehouse at 81 North Riverside Avenue in Croton on Hudson

Croton Energy Group

75 S Riverside Avenue Suite G

Croton-on-Hudson, NY 10520

Contents

Croton Energy Group Inc
75 South Riverside Avenue
Croton-on-Hudson, New York 10520
914-862-4177
crotonenergy.com
your solar energy experts

4/4/2022

Bryan Healy

bhealy@crotononhudson-ny.gov

Re: Response to Procurement and Installation at the Washington Engine Firehouse of a Rooftop Solar PV System for Solar Power Production

Dear Mr. Healy:

Having reviewed the RFP for rooftop solar at the Washington firehouse , and surveying the site at 81 N. Riverside Avenue, Croton-on-Hudson, we fully understand the requirements of this project and the needs of the Village of Croton-on-Hudson . With that understanding we are proud to present this proposal in response to that request.

Please send any response or questions to

Gregory King

CEG head of Sales

gking@crotonenergy.com

914-862-4177

Sincerely

Patrick Dias

4/4/2022

President Croton Energy Group

2.Executive Summary

Project Description

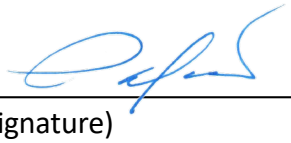
We propose that we Croton Energy Group (CEG) procure and install a rooftop solar pv system on the Washington Firehouse.
CEG will be responsible for the System's design, engineering, permitting, installation, testing, operation, maintenance, repair, management including, without limitation, procurement of the solar photovoltaic equipment and related services, including any necessary changes to the utility service. CEG will be solely responsible for commissioning, interconnection, metering, and for providing security for the system during installation and startup operation. CEG will be responsible for all project costs including, but not limited to: the furnishing of all materials, services, labor, performance and payment bonds, insurance, and other costs incurred in the preparation of this response and the performance of the contract.
CEG will subcontract the services of it's "strategic partner" Switch Electric, a local business as the "Licensed Electrician" for purposes of interconnection with the existing ConEdison grid.

The installation of this project shall include permanently installed safety railing to meet OSHA standards of workplace safety for any construction or future maintenance.

This includes on-site monitoring provided by SolarEdge for the life of the system.

3.Certificate of Non-Collusion

The undersigned certifies, under penalties of perjury, that this bid or proposal has been made and submitted in good faith and without collusion or fraud with any other person. As used in this certification, the word "person" shall mean any natural person, business, partnership, corporation, union, committee, club or other organization, entity, or group of individuals.



(Signature)

Patrick Dias

(Name of person signing proposal)

Croton Energy Group Inc

(Name of business)

Section 2 – Experience & Qualification

- Founded in 2011 Croton Energy Group has been installing solar continuously for 11 years this April.
- Croton Energy Group is a New York S-Corp
- Tax ID 09-0692614
- CEG corporate offices are located at 75 S. Riverside Avenue, Croton-on-Hudson, NY 10520
- Currently we have 5 employees working in our office
- EMR rating in 2021 was 0.92

Your firm's Experience Modification Rate (EMR) for each of the past three years and your firm's OSHA ratings (Recordable Incidence Rates and Lost Workday Incident Rates) for the past three years

- Our firm has not been involved in and is not presently involved in any litigation and is not debarred, suspended or otherwise prohibited from practice by any federal, state, or local agency.

- References
    - Croton Community Solar
        - Croton DPW

        - System Size: 306kW
        - Metering for power production
        - Date Completed: June 3, 2020
        - Contact Name: Bryan Healy Email: bhealy@crotononhudson-ny.gov

- Bedford Police Department Carport

  - System Size: 42.55 kW
  - Metering for power production
  - Date Completed: November 1, 2019
  - Contact Name: Abe Zambrano Email: azambrano@bedfordny.gov

- St Theresa

  - System Size: 161.95 kW
  - Metering for power production
  - Date Completed: February 2, 2022
  - Contact Name: Shelby Hang Email: shelby@ecogyenergy.com

- Project Development Experience
  - CEG has installed over 5 Megawatts of New York solar in the last 5 years in over 50 projects
  - We currently operate and manage approximately 75 solar rooftop systems.
  - Our customers are residential, municipalities, utilities, developers, and commercial as well as non-profit organizations.
  - Projects installed by CEG have a particular feel of quality and attention to detail. Systems are designed and installed to produce with minor maintenance for thirty years and are backed by the manufacturers warranties as well as CEG.
  - At CEG we pride ourselves on our record of safety. No employee has suffered injury due to our lack of attendance to the safety standards outlined by OSHA.

- Project Financing Capability
  - CEG has installed ten systems that are not on single family homes
  - Provide most recent audited financial statements, annual reports, consolidated financials, and Form 10-K (if any). If available, provide similar materials for parent entities, significant affiliates and collaborators.
  - Provide proof of installation of past solar projects: source(s), dollar value, and date

Section 3 – Proposal Narrative

Provide a detailed plan of the proposed project. Project plans must include the following:

- Project Management Plan
    - Contract signing initiates timeline
    - CEG will send the project to the engineering team
    - Reserve modules and equipment for the project prepay as necessary.
    - 30 days in engineering
    - File interconnection application, NYSERDA application and building permit application. Our electrician will separately file with an electrical inspection service.
    - 30 days in permitting
    - Schedule delivery of equipment.
    - Allow 15 – 30 days to construction date
    - Allow 15 days for construction
    - Schedule inspections
    - Allow 30 days for "Permission to Operate" from the utility.
    - Approximate length of project 120 days.

- Site Work and onsite interaction with the Firehouse and it's business:
    - All work onsite work and visits will be coordinated with the Villages on-site manager/ representative.
    - There's access to the buildings roof from behind the building perpendicular to High Street. This will be used to access the rooftop via ladder. Front entry will only be necessary to access the Electric Room.
- Deliveries:
    - Deliveries will be met and trucks offloaded on High Street. With the exception of the solar modules all deliveries will be immediately moved to the roof.
    - There will be 3 main deliveries
        - Safety rail scheduled for day 1
        - Solar racking racking scheduled for day 2
        - Solar modules scheduled for day 3 Modules will wait for installation on the neighboring driveway. We'll attempt to schedule delivery as close to "on time" as we can.
    - Sequence of installation events
        - Safety railing is a permanent installation and requires the support of the roofing contractor that holds the warranty. This will be approximately 5 days
        - Solar racking installation will begin near High Street as the railing is completed

in that area. A temporary barrier will be erected to keep workers 6' from any unfinished railing area.
        - Solar racking and PV wiring will take place over a 5 day period with modules installed on the last two days of the installation.
        - AC Electrical work and interconnection will take about 5 days and require approximately 1 hour of shutdown. This coordinated with the onsite Village Rep.
        - Testing and commission takes place after all workers have left the site and requires no shutdown.
        - Over the final 30 days we will be back and forth with inspectors and the utility may want a witness test.
- Project Financing Plan
    - We understand that this project will be financed by NYSERDA and the price for the PV system and it's installation and maintenance for four years is not to exceed $95,000. Milestone payments to be coordinated upon award.
- Operations and Maintenance Plan
    - CEG monitors all systems on the SolarEdge website daily. If a performance issue is noted a team is sent to review the problem. For a period of four years CEG will replace any item that is determined to be "under-performing" at no cost to the Village regardless of manufacturer's warranty. CEG will perform an onsite review and check-up of all system related equipment and wiring to ensure proper function and performance every 2 years. A longer maintenance contract will be made available to the village after the four year warranty period has expired.
- Local Business Utilization Plan
    - Croton Energy Group and it's subcontractors are local Croton businesses

Section 4 –Technical Proposal

Please See the attached Technical Proposal

Section 5 – Price Proposal

Appendix 2: Price Proposal Template

PV System Size	37.31kW dc	**Annual System Degradation Factor**	0.05 %/year
Year 1 Estimated kWh Generation	42,166kWh	All-inclusive Price	$100,526
		Total incentives	$7,462
		Price Net of incentives	$93,064

Appendix 4: Surety Bond Form

CERTIFICATE OF SURETY

The undersigned hereby certify that they are the duly authorized agents of

_____

_____

duly authorized to do business in the State of New York, and agree to furnish to

_____

surety bonds for the faithful performance of any and all provisions contained in the Specifications and Contract. The maximum amount that we will be surety for on each bond is:

_____

Surety Company or Agent

_____

By

_____

The terms of the Surety Company for furnishing the bond are hereby accepted.

Name of Bidder

_____

By

_____

Witness (signature)

Title

Exhibit A – Description of Property

The tax map of the Village lists the parcels of land where the Facility is located as:

67.20-4-40

Exhibit B – Photos of Premises

Firehouse from North Riverside Avenue and aerial view of rooftop prior to 2019 re-roofing

Rooftop photos taken in 2021 (after re-roofing)

CROTON ENERGY GROUP INC
solar made better

Solar Photovoltaic Proposal

Jinko 410

Prepared For

Village of Croton
(914) 271-6501
energywiz@aol.com

*Our motto is "**Solar Made Better.**" Croton Energy Group Inc (CEG) provides comprehensive solar energy systems design, installation and operation for commercial and residential clients throughout New York State. Led by NABCEP PV Installation Professional™ Patrick Dias, CEG is a licensed Westchester County Home Improvement Contractor (License #26932-H13), and a NYSERDA eligible solar installer (PV Contractor #5051).*

NABCEP CERTIFIED
PV Installation Professional
Patrick Dias
Cert #102415-012383

Prepared By

4/5/2022

Gregory King
(914) 844-1720
gking@crotonenergy.com
Croton Energy Group Inc.
75 South Riverside Ave.
Croton-on-Hudson, NY, 10520
NYSERDA PV Contractor #5051
Westchester County Contractor #26932-H13

Contents

Notes:
Price includes installing a 3' Hollander speed/safety rail on top of three edges of the parapet wall (except for the south west side).

Tax incentive information:
Find the **Federal Investment Tax Credit** instructions for your solar energy system here: https://www.irs.gov/forms-pubs/about-form-5695
Find the **New York State** solar energy credit instructions here: https://www.tax.ny.gov/pit/credits/solar_energy_system_equipment_credit.htm

Site photo and rendered simulation of the solar system proposed for Jinko 410.

Prepared By: Gregory King
P: (914) 844-1720
E: gking@crotonenergy.com

Date: 4/5/2022

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P: (914) 844-1720
E: gking@crotonenergy.com

Date: 4/5/2022

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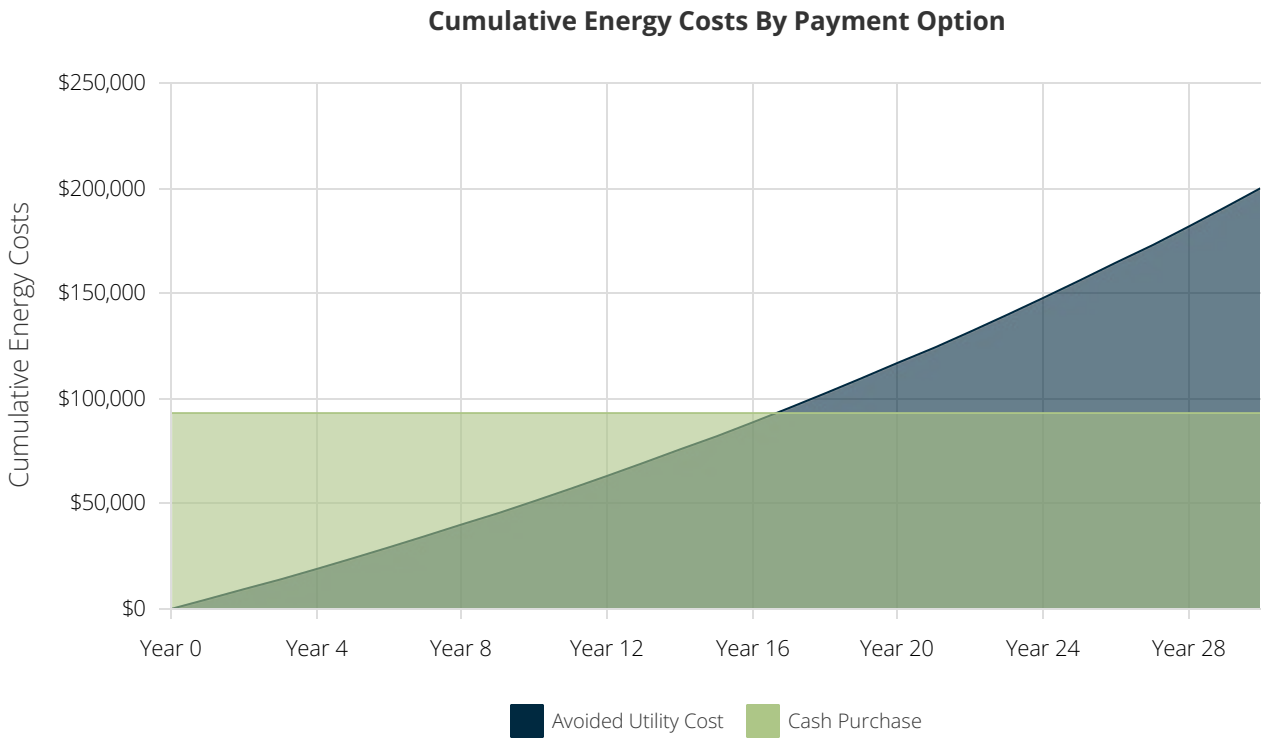
1 Project Summary

Payment Options	Cash Purchase
Gross Project Cost	$100,526
Total Incentives	$7,462
LCOE PV Generation	$0.079 /kWh
Payback Period	16.6 Years
Electric Bill Savings - Year 1	$4,589
IRR-30 Year	5.1%
ROI Term	115.0%

Combined Solar PV Rating

Power Rating: 37,310 W-DC (32,644 W-AC-CEC)

Energy Production: 42,166 kWh in year 1



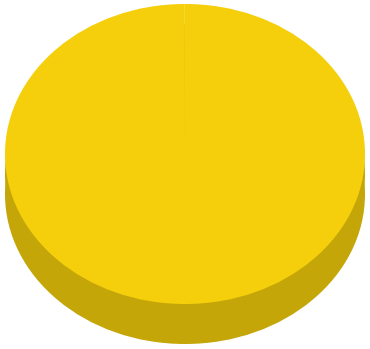
2 Project Details
2.1 Solar Photovoltaic (PV) System Details

General Information
Facility: Facility #1
Address: 81 N Riverside Ave Croton-On-Hudson NY 10520

Solar PV System Rating
Power Rating: 37,310 W-DC
Energy Production: 42,166 kWh in yr 1

Solar PV Equipment Description
Solar Panels: (91) Jinko Solar JKM410M-72HL-V-A3.2-US
Inverters: (1) SolarEdge SE43.2K

Energy Consumption Mix
Annual Energy Use: 31,914 kWh

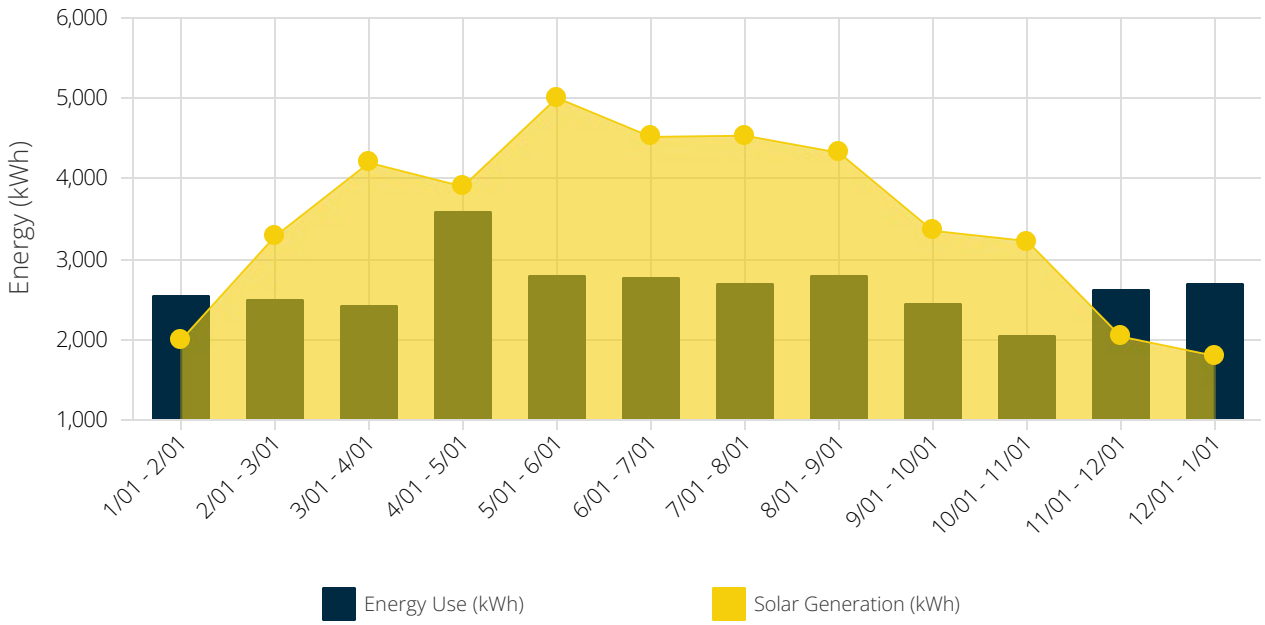


Utility	-10,252 kWh (0.00%)
Solar PV	42,166 kWh (100.00%)

Solar PV Equipment Warranties
Solar Panels: 25 Year (Power and Product)
Inverters: 12 Years

Solar PV System Cost and Incentives	
Solar PV System Cost	$100,526
PV Incentives	-$7,462
Net Solar PV System Cost	**$93,064**

Monthly Energy Use vs Solar Generation



Prepared By: Gregory King
P: (914) 844-1720
E: gking@crotonenergy.com

Date: 4/5/2022

CROTON ENERGY GROUP INC
solar made better

2.2 Rebates and Incentives

This section summarizes all incentives available for this project. The actual rebate and incentive amounts for this project are shown in each example.

NY Sun - Nonresidential (Block 10) Con Edison

New York State Energy Research and Development Authority (NYSERDA) through the NY-Sun Incentive Program provides incentives for installation of non-residential new grid connected solar photovoltaic (PV) systems with a maximum size of 7.5MW DC. The incentive is structured as a 100% upfront payment. The upfront payment is calculated as $.20 * System Size (W).

Total Incentive Value: **$7,462**

2.3 Utility Rates

The table below shows the rates associated with your current utility rate schedule (EL 9). Your estimated electric bills after solar are shown on the following page.

Customer Charges				Energy Charges				Demand Charges			
Season	Charge Type	Rate Type	EL 9	Season	Charge Type	Rate Type	EL 9	Season	Charge Type	Rate Type	EL 9
S	Flat Rate	per billing period	$205.19	S	Flat Rate	Import	$0.0999	S	T < 5 kw	Import	$3.33
W1	Flat Rate	per billing period	$165.25	W1	Flat Rate	Import	$0.0999	S	5 kw < T	Import	$32.39
W2	Flat Rate	per billing period	$165.25	W2	Flat Rate	Import	$0.0999	W1	T < 5 kw	Import	$3.33
W3	Flat Rate	per billing period	$165.25	W3	Flat Rate	Import	$0.0999	W1	5 kw < T	Import	$26.28
								W2	T < 5 kw	Import	$0.63
								W2	5 kw < T	Import	$23.58
								W3	T < 5 kw	Import	$3.33
								W3	5 kw < T	Import	$26.28

2.4 Current Electric Bill

The table below shows your annual electricity costs based on the most current utility rates and your previous 12 months of electrical usage.

Rate Schedule: ConEd - EL 9

Time Periods	Energy Use (kWh)	Max Demand (kW)	Charges			
Bill Ranges & Seasons	Total	NC / Max	Other	Energy	Demand	Total
1/1/2021 - 2/1/2021 W2	2,538	15	$165	$254	$239	$658
2/1/2021 - 3/1/2021 W2	2,502	13	$165	$250	$192	$607
3/1/2021 - 4/1/2021 W2	2,430	10	$165	$243	$121	$529
4/1/2021 - 5/1/2021 W2	3,582	15	$165	$358	$239	$762
5/1/2021 - 6/1/2021 W3	2,790	10	$165	$279	$148	$592
6/1/2021 - 7/1/2021 S	2,772	9	$205	$277	$146	$628
7/1/2020 - 8/1/2020 S	2,700	14	$205	$270	$308	$783
8/1/2020 - 9/1/2020 S	2,790	10	$205	$279	$179	$663
9/1/2020 - 10/1/2020 S	2,448	18	$205	$245	$438	$887
10/1/2020 - 11/1/2020 W1	2,052	7	$165	$205	$69	$439
11/1/2020 - 12/1/2020 W2	2,628	13	$165	$263	$192	$620
12/1/2020 - 1/1/2021 W2	2,682	8	$165	$268	$74	$507
Total	31,914	-	$2,143	$3,188	$2,344	$7,675

2.5 New Electric Bill

Rate Schedule: ConEd - EL 9

Time Periods	Energy Use (kWh)	Max Demand (kW)	Charges			
Bill Ranges & Seasons	Total	NC / Max	Other	Energy	Demand	Total
1/1/2021 - 2/1/2021 W2	546	15	$165	$55	$239	$459
2/1/2021 - 3/1/2021 W2	-780	11	$165	$78	$145	$232
3/1/2021 - 4/1/2021 W2	-1,768	9	$165	$177	$97	$86
4/1/2021 - 5/1/2021 W2	-320	12	$165	$32	$168	$301
5/1/2021 - 6/1/2021 W3	-2,215	7	$165	$221	$69	$13
6/1/2021 - 7/1/2021 S	-1,747	5	$205	$175	$17	$47
7/1/2020 - 8/1/2020 S	-1,834	8	$205	$183	$114	$136
8/1/2020 - 9/1/2020 S	-1,533	5	$205	$153	$17	$69
9/1/2020 - 10/1/2020 S	-904	14	$205	$90	$308	$423
10/1/2020 - 11/1/2020 W1	-1,173	5	$165	$117	$17	$65
11/1/2020 - 12/1/2020 W2	592	13	$165	$59	$192	$416
12/1/2020 - 1/1/2021 W2	886	8	$165	$89	$74	$328
Total	-10,250	-	$2,143	$512	$1,456	$3,086

Annual Electricity Savings: $4,589

3 Cash Flow Analysis

3.1 Cash Purchase

Assumptions and Key Financial Metrics

Total Project Costs	$100,526	IRR - Term	5.1%	Payback Period	16.6 Years
ROI	115.0%	PV Degradation Rate	0.50%	Discount Rate	5.0%
Energy Cost Escalation Rate	3.0%	Federal Income Tax Rate	30.0%	State Income Tax Rate	8.0%

Years	Project Costs	PV Incentives	Electric Bill Savings	Total Cash Flow	Cumulative Cash Flow
Upfront	-$100,526	$7,462	-	-$93,064	-$93,064
1	-	-	$4,589	$4,589	-$88,475
2	-	-	$4,703	$4,703	-$83,772
3	-	-	$4,820	$4,820	-$78,952
4	-	-	$4,939	$4,939	-$74,013
5	-	-	$5,062	$5,062	-$68,951
6	-	-	$5,187	$5,187	-$63,764
7	-	-	$5,315	$5,315	-$58,449
8	-	-	$5,446	$5,446	-$53,003
9	-	-	$5,581	$5,581	-$47,422
10	-	-	$5,718	$5,718	-$41,704
11	-	-	$5,859	$5,859	-$35,845
12	-	-	$6,003	$6,003	-$29,842
13	-	-	$6,150	$6,150	-$23,692
14	-	-	$6,301	$6,301	-$17,391
15	-	-	$6,455	$6,455	-$10,936
16	-	-	$6,613	$6,613	-$4,322
17	-	-	$6,775	$6,775	$2,453
18	-	-	$6,940	$6,940	$9,393
19	-	-	$7,109	$7,109	$16,502
20	-	-	$7,282	$7,282	$23,785
21	-	-	$7,459	$7,459	$31,244
22	-	-	$7,641	$7,641	$38,885
23	-	-	$7,826	$7,826	$46,710
24	-	-	$8,015	$8,015	$54,726
25	-	-	$8,209	$8,209	$62,935
26	-	-	$8,407	$8,407	$71,342
27	-	-	$8,610	$8,610	$79,952
28	-	-	$8,817	$8,817	$88,769
29	-	-	$9,029	$9,029	$97,799
30	-	-	$9,246	$9,246	$107,045
Totals:	-$100,526	$7,462	$200,109	$107,045	-

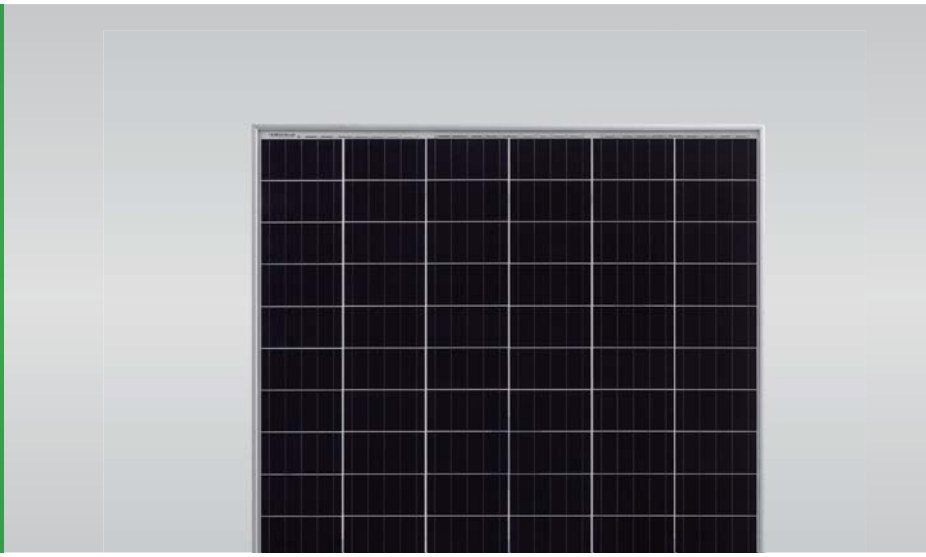
jinkosolar.us

Building Your Trust in Solar

Eagle 72HM G2
390-410 Watt

MONO PERC HALF CELL MODULE

Positive power tolerance of 0~+3%



KEY FEATURES

Diamond Cell Technology
Uniquely designed high performance 5 busbar mono PERC half cell

High Voltage
UL and IEC 1500V certified; lowers BOS costs and yields better LCOE

Higher Module Power
Decrease in current loss yields higher module efficiency

Shade Tolerance
More shade tolerance due to twin arrays

PID FREE
Reinforced cell prevents potential induced degradation

Strength and Durability
Certified for high snow (5400Pa) and wind (2400 Pa) loads

- ISO9001:2008 Quality Standards
- ISO14001:2004 Environmental Standards
- OHSAS18001 Occupational Health & Safety Standards
- IEC61215, IEC61730 certified products
- UL1703 certified products

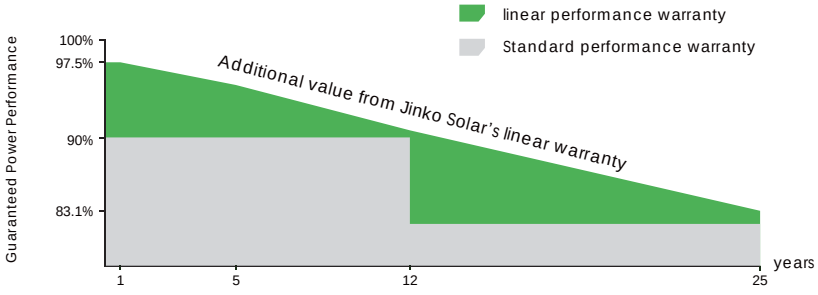
Nomenclature:

JKM410M-72HL-V

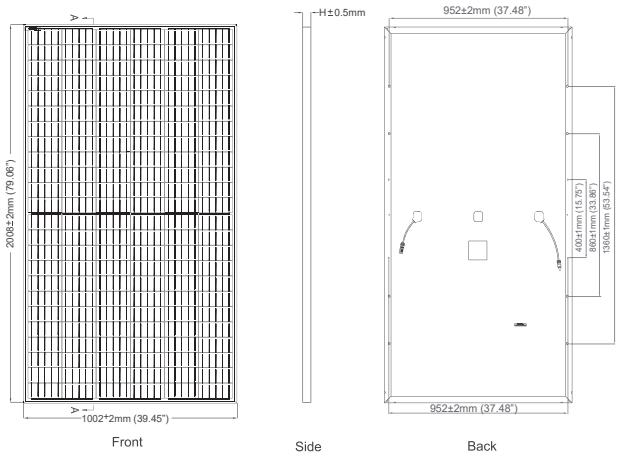
Code	Cell	Code	Cell	Code	Certification
null	Full	null	Normal	null	1000V
H	Half	L	Diamond	V	1500V

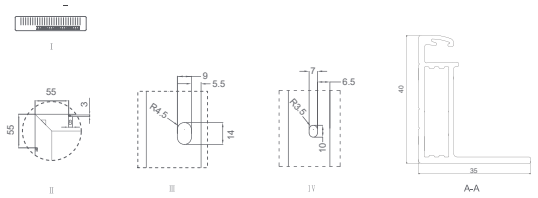
LINEAR PERFORMANCE WARRANTY

12 Year Product Warranty • 25 Year Linear Power Warranty



Engineering Drawings



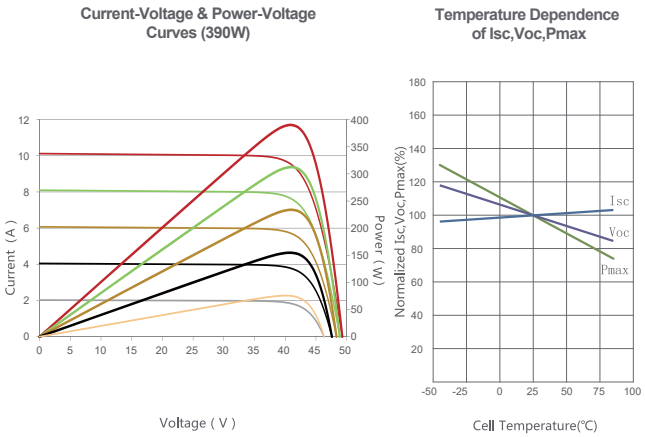


Packaging Configuration

(Two pallets = One stack)

27pcs/pallet, 54pcs/stack, 594pcs/40'HQ Container

Electrical Performance & Temperature Dependence



Mechanical Characteristics

Cell Type	Mono PERC Diamond Cell (158.75 x 158.75 mm)
No.of Half-cells	144 (6×24)
Dimensions	2008×1002×40mm (79.06×39.45×1.57 inch)
Weight	22.5 kg (49.6 lbs)
Front Glass	3.2mm, Anti-Reflection Coating, High Transmission, Low Iron, Tempered Glass
Frame	Anodized Aluminium Alloy
Junction Box	IP67 Rated
Output Cables	12 AWG, (+) 1400mm(55.12 in), (-) 1400mm(55.12 in) or Customized Length
Fire Type	Type 1

SPECIFICATIONS

Module Type	JKM390M-72HL-V		JKM395M-72HL-V		JKM400M-72HL-V		JKM405M-72HL-V		JKM410M-72HL-V	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax)	390Wp	294Wp	395Wp	298Wp	400Wp	302Wp	405Wp	306Wp	410Wp	310Wp
Maximum Power Voltage (Vmp)	41.1V	39.1V	41.4V	39.3V	41.7V	39.6V	42.0V	39.8V	42.3V	40.0V
Maximum Power Current (Imp)	9.49A	7.54A	9.55A	7.60A	9.60A	7.66A	9.65A	7.72A	9.69A	7.76A
Open-circuit Voltage (Voc)	49.3V	48.0V	49.5V	48.2V	49.8V	48.5V	50.1V	48.7V	50.4V	48.9V
Short-circuit Current (Isc)	10.12A	8.02A	10.23A	8.09A	10.36A	8.16A	10.48A	8.22A	10.60A	8.26A
Module Efficiency STC (%)	19.38%		19.63%		19.88%		20.13%		20.38%	
Operating Temperature (℃)	-40℃~+85℃									
Maximum System Voltage	1500VDC(UL)/1500VDC(IEC)									
Maximum Series Fuse Rating	20A									
Power Tolerance	0~+3%									
Temperature Coefficients of Pmax	-0.36%/℃									
Temperature Coefficients of Voc	-0.28%/℃									
Temperature Coefficients of Isc	0.048%/℃									
Nominal Operating Cell Temperature (NOCT)	45±2℃									

STC: Irradiance 1000W/m² Cell Temperature 25°C AM=1.5

NOCT: Irradiance 800W/m² Ambient Temperature 20°C AM=1.5 Wind Speed 1m/s

* Power measurement tolerance: ± 3%

CAUTION: READ SAFETY AND INSTALLATION INSTRUCTIONS BEFORE USING THE PRODUCT.
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INVERTERS

Three Phase Inverter with Synergy Technology

for the 208V Grid for North America

SE43.2KUS

Specifically designed to work with power optimizers

- Easy two-person installation – each unit mounted separately, equipped with cables for simple connection between units
- Balance of System and labor reduction compared to using multiple smaller string inverters
- Independent operation of each unit enables higher uptime and easy serviceability
- No wasted ground area: wall/rail mounted, or horizontally mounted under the modules (10˚inclination)
- Integrated arc fault protection and rapid shutdown for NEC 2014 and 2017, per article 690.11 and 690.12
- Built-in module-level monitoring with Ethernet or cellular GSM
- Fixed voltage inverter for superior efficiency (97%) and longer strings
- Integrated DC Safety Switch and optional surge protection
- Built-in RS485 Surge Protection, to better withstand lightning events

solaredge

/ Three Phase Inverter with Synergy Technology for the 208V Grid for North America

SE43.2KUS

	SE43.2KUS	
OUTPUT		
Rated AC Power Output	43200	VA
Maximum AC Power Output	43200	VA
AC Output Line Connections	4-wire WYE (L1-L2-L3-N) plus PE or 3 wire Delta	
AC Output Voltage Minimum-Nominal-Maximum[1] (L-N)	105-120-132.5	Vac
AC Output Voltage Minimum-Nominal-Maximum[1] (L-L)	183-208-229	Vac
AC Frequency Min-Nom-Max[1]	59.3 - 60 - 60.5	Hz
Maximum Continuous Output Current (per Phase) @208V	120	A
GFDI Threshold	1	A
Utility Monitoring, Islanding Protection, Configurable Power Factor, Country Configurable Thresholds	Yes	
INPUT		
Maximum DC Power (Module STC), Inverter / Unit	58200 / 19400	W
Transformer-less, Ungrounded	Yes	
Maximum Input Voltage DC to Gnd	300	Vdc
Maximum Input Voltage DC+ to DC-	600	Vdc
Nominal Input Voltage DC to Gnd	200	Vdc
Nominal Input Voltage DC+ to DC-	400	Vdc
Maximum Input Current	114	Adc
Maximum Input Short Circuit Current	135	Adc
Reverse-Polarity Protection	Yes	
Ground-Fault Isolation Detection	350kΩ Sensitivity per Unit	
CEC Weighted Efficiency	97	%
Nighttime Power Consumption	< 12	W
ADDITIONAL FEATURES		
Supported Communication Interfaces	RS485, Ethernet, Cellular GSM (optional)	
Rapid Shutdown	NEC2014 and NEC2017 compliant/certified, upon AC Grid Disconnect	
RS485 Surge Protection	Built-in	
DC SAFETY SWITCH		
DC Disconnect	1000V / 3 x 40A	
DC Surge Protection	Optional, Type II, field replaceable	
STANDARD COMPLIANCE		
Safety	UL1741, UL1741 SA, UL1699B, UL1998, CSA 2.22	
Grid Connection Standards	IEEE 1547, Rule 21, Rule 14 (HI)	
Emissions	FCC part15 class A	
INSTALLATION SPECIFICATIONS		
Number of units	3	
AC Output Conduit Size / Max AWG / Max PE AWG	2" / 4/0 / 4	
DC Output Conduit Size / Terminal Block AWG Range / Number of Strings[2]	2 x 1.25" / 6-14 / 9 strings	
Dimensions (H x W x D)	Primary Unit: 37 x 12.5 x 10.5 / 940 x 315 x 260; Secondary Unit: 21 x 12.5 x 10.5 / 540 x 315 x 260	in / mm
Weight	Primary Unit: 105.8 / 48; Secondary Unit 99.2 / 45	lb / kg
Operating Temperature Range	-40 to +140 / -40 to +60[3]	°F / °C
Cooling	Fan (user replaceable)	
Noise	< 60	dBA
Protection Rating	NEMA 3R	
Bracket Mounted (Brackets Provided)		

[1] For other regional settings please contact SolarEdge support
[2] Single input option per unit (up to 3AWG) available
[3] For power de-rating information refer to: https://www.solaredge.com/sites/default/files/se-temperature-derating-note-na.pdf

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CE RoHS