

25KW Suniva 280 Solar Edge 1

Panel Size	Qty	Total Wattage of the system			
280	90	25,200	Watts		
Total Cost of the equipment for the 6KW Micro-Inverter Grid-Tied PV system					
Item Code	DESCRIPTION	Quantity	Price Each	Amount	
OPT280SW-210	280 Watts, Suniva Solar Panel, Mono, Silver, B, 60 Cells, UL, Made in USA	90	170.80	15372.00	
P300-2NM4ARS	Solar Edge DC Optimizer	90	69.00	6210.00	
SE7600A-US	Solar Edge Inverter, 7.6KW, 240VAC, 60HZ	3	1450.00	4350.00	
PV-Unirac-SM	PV Mounting Unirac Solar Mount Roof Mounting Hardware for 90 panels, Includes SM Rails, L-feets, Grounding Lugs, Integrated Bonding End and Mid Clamps	1	4650.00	4650.00	
QMSC-A	Quickmount PV Classic Composition Mount with 6" hanger bolt	180	18.00	3240.00	
Total Cost of the materials without any incentives or rebates				\$33,822.00	\$ 1.34 per Watt
Sub Total Before Tax Credit				\$33,822.00	
Federal Tax Credit of 30%				-10146.6	
Other Local Incentives					
Total cost of the equipment after the tax credit				\$23,675.40	\$ 0.94 per Watt
Simple Payback Period for the materials only				6.06	Years
<p>Note: All the products come with manufacturer warranty - 25 years for Solar Panels, 5 years for Inverter, 25 Years for Mounting etc. This system qualifies for IBC 2012 (Fire Class A compliance) - strongly recommended for residential roof-top solar in fire prone areas such as Sand Diego, Yosomite etc. The roof mount system is a flush mounted to the roof. The sacings is calculated based on the electricity cost of \$.10/KWH-AC</p>					
<p style="color: red;">If you are from a place where the utility electric cost is different , than the payback period above will vary</p>					
	If your rate is (\$/KWH)	Payback would be, after 30% Tax Credit			
	\$.15/KWH	4.04	Years		
	\$.20/KWH	3.03	Years		
<p>Additional incentives are available and maybe significant in CA, TX,FL, NY, MA, NH, GA, CO, WA,OR. Please go to http://www.dsireusa.org/ for more information regarding additional incentives.</p>					
<p style="color: blue;">If you need to customize this system a little bit or have questions regarding this please contact our engineers directly here</p>					

11KW Suniva 280 Solar Edge 1

Panel Size	Qty	Total Wattage of the system				
280	40		11,200	Watts		
Total Cost of the equipment for the 6KW Micro-Inverter Grid-Tied PV system						
Item Code	DESCRIPTION	Quantity	Price Each	Amount		
OPT280SW-210	280 Watts, Suniva Solar Panel, Mono, Silver, B, 60 Cells, UL, Made in USA	40	170.80	6832.00		
P300-2NM4ARS	Solar Edge DC Optimizer	40	69.00	2760.00		
SE11400A-US-U	Solar Edge Inverter, 11.4KW, 240VAC, 60Hz	1	1986.00	1986.00		
PV-Unirac-SM	PV Mounting Unirac Solar Mount Roof Mounting Hardware for 40 panels, Includes SM Rails, L-feets, Grounding Lugs, Integrated Bonding End and Mid Clamps	1	2350.00	2350.00		
QMSC-A	Quickmount PV Classic Composition Mount with 6" hanger bolt	80	18.00	1440.00		
Total Cost of the materials without any incentives or rebates				\$15,368.00	\$ 1.37	per Watt
Sub Total Before Tax Credit				\$15,368.00		
Federal Tax Credit of 30%				-4610.4		
Other Local Incentives						
Total cost of the equipment after the tax credit				\$10,757.60	\$ 0.96	per Watt
Simple Payback Period for the materials only				6.19	Years	
<p>Note: All the products come with manufacturer warranty - 25 years for Solar Panels, 5 years for Inverter, 25 Years for Mounting etc. This system qualifies for IBC 2012 (Fire Class A compliance) - strongly recommended for residential roof-top solar in fire prone areas such as Sand Diego, Yosomite etc. The roof mount system is a flush mounted to the roof. The sacings is calculated based on the electricity cost of \$.10/KWH-AC</p>						
If you are from a place where the utility electric cost is different , than the payback period above will vary						
	If your rate is (\$/KWH)	Payback would be, after 30% Tax Credit				
	\$.15/KWH	4.13	Years			
	\$.20/KWH	3.10	Years			
<p>Additional incentives are available and maybe significant in CA, TX,FL, NY, MA, NH, GA, CO, WA,OR. Please go to http://www.dsireusa.org/ for more information regarding additional incentives.</p>						
If you need to customize this system a little bit or have questions regarding this please contact our engineers directly here						

10KW Suniva 280 Solar Edge 1

Panel Size	Qty	Total Wattage of the system				
280	38		10,640	Watts		
Total Cost of the equipment for the 6KW Micro-Inverter Grid-Tied PV system						
Item Code	DESCRIPTION	Quantity	Price Each	Amount		
OPT280SW-210	280 Watts, Suniva Solar Panel, Mono, Silver, B, 60 Cells, UL, Made in USA	38	170.80	6490.40		
P300-2NM4ARS	Solar Edge DC Optimizer	38	69.00	2622.00		
SE11400A-US-U	Solar Edge Inverter, 11.4KW, 240VAC, 60Hz	1	1986.00	1986.00		
PV-Unirac-SM	PV Mounting Unirac Solar Mount Roof Mounting Hardware for 38 panels, Includes SM Rails, L-feets, Grounding Lugs, Integrated Bonding End and Mid Clamps	1	2350.00	2350.00		
QMSC-A	Quickmount PV Classic Composition Mount with 6" hanger bolt	76	18.00	1368.00		
Total Cost of the materials without any incentives or rebates				\$14,816.40	\$ 1.39	per Watt
Sub Total Before Tax Credit				\$14,816.40		
Federal Tax Credit of 30%				-4444.92		
Other Local Incentives						
Total cost of the equipment after the tax credit				\$10,371.48	\$ 0.97	per Watt
Simple Payback Period for the materials only				6.28	Years	
<p>Note: All the products come with manufacturer warranty - 25 years for Solar Panels, 5 years for Inverter, 25 Years for Mounting etc. This system qualifies for IBC 2012 (Fire Class A compliance) - strongly recommended for residential roof-top solar in fire prone areas such as Sand Diego, Yosomite etc. The roof mount system is a flush mounted to the roof. The sacings is calculated based on the electricity cost of \$.10/KWH-AC</p>						
<p style="color: red;">If you are from a place where the utility electric cost is different , than the payback period above will vary</p>						
	If your rate is (\$/KWH)		Payback would be, after 30% Tax Credit			
	\$.15/KWH		4.19	Years		
	\$.20/KWH		3.14	Years		
<p>Additional incentives are available and maybe significant in CA, TX,FL, NY, MA, NH, GA, CO, WA,OR. Please go to http://www.dsireusa.org/ for more information regarding additional incentives.</p>						
<p style="color: blue;">If you need to customize this system a little bit or have questions regarding this please contact our engineers directly here</p>						

8KW Suniva 280 Solar Edge

Panel Size	Qty	Total Wattage of the system				
280	30	8,400	Watts			
Total Cost of the equipment for the 6KW Micro-Inverter Grid-Tied PV system						
Item Code	DESCRIPTION	Quantity	Price Each	Amount		
OPT280SW-210	280 Watts, Suniva Solar Panel, Mono, Silver, B, 60 Cells, UL, Made in USA	30	173.60	5208.00		
P300-2NM4ARS	Solar Edge DC Optimizer	30	69.00	2070.00		
SE7600A-US-U	Solar Edge Inverter, 7.6KW, 240VAC, 60Hz	1	1586.00	1586.00		
PV-Unirac-SM	PV Mounting Unirac Solar Mount Roof Mounting Hardware for 24 panels, Includes SM Rails, Grounding Lugs, Integrated Bonding End and Mid Clamps	1	1298.00	1298.00		
QMHSS	Quickmount PV Quick Hook® for Side Mount Rails	60	22.00	1320.00		
Total Cost of the materials without any incentives or rebates				\$11,482.00	\$ 1.37	per Watt
Sub Total Before Tax Credit				\$11,482.00		
Federal Tax Credit of 30%				-3444.6		
Other Local Incentives						
Total cost of the equipment after the tax credit				\$8,037.40	\$ 0.96	per Watt
Simple Payback Period for the materials only				6.17	Years	
<p>Note: All the products come with manufacturer warranty - 25 years for Solar Panels, 5 years for Inverter, 25 Years for Mounting etc. This system qualifies for IBC 2012 (Fire Class A compliance) - strongly recommended for residential roof-top solar in fire prone areas such as Sand Diego, Yosomite etc. The roof mount system is a flush mounted to the roof. The sacings is calculated based on the electricity cost of \$.10/KWH-AC</p>						
If you are from a place where the utility electric cost is different , than the payback period above will vary						
	If your rate is (\$/KWH)	Payback would be, after 30% Tax Credit				
	\$.15/KWH	4.11	Years			
	\$.20/KWH	3.08	Years			
<p>Additional incentives are available and maybe significant in CA, TX,FL, NY, MA, NH, GA, CO, WA,OR. Please go to http://www.dsireusa.org/ for more information regarding additional incentives.</p>						
If you need to customize this system a little bit or have questions regarding this please contact our engineers directly here						

8KW SolarWorld Solar Edge

Panel Size	Qty	Total Wattage of the system				
240	34	8,160	Watts			
Total Cost of the equipment for the 6KW Micro-Inverter Grid-Tied PV system						
Item Code	DESCRIPTION	Quantity	Price Each	Amount		
SW240-Mono	Solar World 240 Watts, SW 240-Mono , A grade, UL	34	129.60	4406.40		
P300-2NM4ARS	Solar Edge DC Optimizer	34	69.00	2346.00		
SE7600A-US-U	Solar Edge Inverter, 7.6KW, 240VAC, 60Hz	1	1586.00	1586.00		
PV-Unirac-SM	PV Mounting Unirac Solar Mount Roof Mounting Hardware for 24 panels, Includes SM Rails, L-feets, Grounding Lugs, Integrated Bonding End and Mid Clamps	1	1550.00	1550.00		
Total Cost of the materials without any incentives or rebates				\$9,888.40	\$ 1.21	per Watt
Sub Total Before Tax Credit				\$9,888.40		
Federal Tax Credit of 30%				-2966.52		
Other Local Incentives						
Total cost of the equipment after the tax credit				\$6,921.88	\$ 0.85	per Watt
Simple Payback Period for the materials only				5.47	Years	
<p>Note: All the products come with manufacturer warranty - 25 years for Solar Panels, 5 years for Inverter, 25 Years for Mounting etc. This system qualifies for IBC 2012 (Fire Class A compliance) - strongly recommended for residential roof-top solar in fire prone areas such as Sand Diego, Yosomite etc. The roof mount system is a flush mounted to the roof. The sacings is calculated based on the electricity cost of \$.10/KWH-AC</p>						
If you are from a place where the utility electric cost is different , than the payback period above will vary						
	If your rate is (\$/KWH)	Payback would be, after 30% Tax Credit				
	\$.15/KWH		3.65	Years		
	\$.20/KWH		2.73	Years		
<p>Additional incentives are available and maybe significant in CA, TX,FL, NY, MA, NH, GA, CO, WA,OR. Please go to http://www.dsireusa.org/ for more information regarding additional incentives.</p>						
If you need to customize this system a little bit or have questions regarding this please contact our engineers directly here						

11KW SolarWorld Solar Edge

Panel Size	Qty	Total Wattage of the system				
240	48	11,520	Watts			
Total Cost of the equipment for the 6KW Micro-Inverter Grid-Tied PV system						
Item Code	DESCRIPTION	Quantity	Price Each	Amount		
SW240-Mono	Solar World 240 Watts, SW 240-Mono , A grade, UL	48	129.60	6220.80		
P300-2NM4ARS	Solar Edge DC Optimizer	48	69.00	3312.00		
SE10000A-US-U	Solar Edge Inverter, 10KW, 240VAC, 60Hz	1	1986.00	1986.00		
PV-Unirac-SM	PV Mounting Unirac Solar Mount Roof Mounting Hardware for 24 panels, Includes SM Rails, L-feets, Grounding Lugs, Integrated Bonding End and Mid Clamps	1	2150.00	2150.00		
QMSC-A	Quickmount PV Classic Composition Mount with 6" hanger bolt	96	18.00	1728.00		
Total Cost of the materials without any incentives or rebates				\$15,396.80	\$ 1.34	per Watt
Sub Total Before Tax Credit				\$15,396.80		
Federal Tax Credit of 30%				-4619.04		
Other Local Incentives						
Total cost of the equipment after the tax credit				\$10,777.76	\$ 0.94	per Watt
Simple Payback Period for the materials only				6.03	Years	
<p>Note: All the products come with manufacturer warranty - 25 years for Solar Panels, 5 years for Inverter, 25 Years for Mounting etc. This system qualifies for IBC 2012 (Fire Class A compliance) - strongly recommended for residential roof-top solar in fire prone areas such as Sand Diego, Yosomite etc. The roof mount system is a flush mounted to the roof. The sacings is calculated based on the electricity cost of \$.10/KWH-AC</p>						
If you are from a place where the utility electric cost is different , than the payback period above will vary						
	If your rate is (\$/KWH)	Payback would be, after 30% Tax Credit				
	\$.15/KWH	4.02	Years			
	\$.20/KWH	3.02	Years			
<p>Additional incentives are available and maybe significant in CA, TX,FL, NY, MA, NH, GA, CO, WA,OR. Please go to http://www.dsireusa.org/ for more information regarding additional incentives.</p>						
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5KWGridTied_230W_Astroenergy

Panel Size, Watts	Qty	Total Wattage of the system				
230	22	5,060	Watts			
5KW, Grid-Tied Solar PV with Unirac SM Mounting , Astronergy Solar Panels, SMA SB Inverter						
Solar Panels , Inverter and Roof-Mounting Hardware are all made in the USA						
Item Code	DESCRIPTION	Quantity	Price Each	Amount		
CHSM 6610P-230 P	Astronergy poly crystalline Solar panel 230 Watts, UL	22	124.20	2732.40		
SB5000US-US-TL-22	SB5000US-TL-22 SMA grid-tied inverter 5KW, 1.5KW Emergency Outlet	1	2766.00	2766.00		
SMA SWPB	SMA SWPB Piggy Back Webconnect.	1	160.00	160.00		
RS485Cable	RS485Cable 50Ft	1	75.00	75.00		
LA302R	Lightning Arrestor AC	1	40.00	40.00		
LA302DC	Lightning Arrestor DC	1	40.00	40.00		
MNPV6	MNPV6 Midnight Solar	1	101.53	101.53		
MNFUSE 15	15 Amps DC Fuse	2	8.00	16.00		
MNTS	Fuses holder	2	8.00	16.00		
Cable , 10AWG	PV OUTPUT-MC4 MALE & FEMALE 100FT	2	72.00	144.00		
PV-Unirac-SM	PV Mounting Unirac Solar Mount Roof Mounting Hardware for 24 panels, Includes SM Rails, L-feets, Grounding Lugs, Integrated Bonding End and Mid Clamps.	1		1343.00		
Total Cost of the materials without any incentives or rebates				\$7,433.93	\$ 1.47	per Watt
Sub Total Before Tax Credit				\$7,433.93		
Federal Tax Credit of 30%				-2230.179		
Other Local Incentives						
Total cost of the equipment after the tax credit				\$5,203.75	\$ 1.03	per Watt
Simple Payback Period for the materials only				6.63	Years	
Note: All the products come with manufacturer warranty - 25 years for Solar Panels, 5 years for Inverter, 25 Years for Mounting etc. The roof mount system is a flush mounted to the roof. The sacings is calculated based on the electricity cost of \$.10/KWH-AC						
If you are from a place where the utility electric cost is different , than the payback period above will vary						
	If your rate is (\$/KWH)	Payback would be, after 30% Tax Credit				
	\$.15/KWH	4.42	Years			
	\$.20/KWH	3.31	Years			
Additional incentives are available and maybe significant in CA, TX,FL, NY, MA, NH, GA, CO, WA,OR. Please go to http://www.dsireusa.org/ for more information regarding additional incentives.						
If you need to customize this system a little bit or have questions regarding this please contact our engineers directly here						

6.7KWGridTied_240Watt_Mounting

Panel Size, Watts	Qty	Total Wattage of the system				
240	25	6,000	Watts			
6KW, Grid-Tied Solar PV with Unirac SM Mounting , Solar World Solar Panels, SMA SB Inverter						
Solar Panels , Inverter and Roof-Mounting Hardware are all made in the USA						
Item Code	DESCRIPTION	Quantity	Price Each	Amount		
SW240-Mono	Solar World 240 Watts, SW 240-Mono , A grade, UL	25	129.60	3240.00		
SB6000US-US-TL-22	6KW SMA grid-tied inverter , With 1.5KW Emergency Outlet	1	2766.00	2766.00		
SMA SWPB	SMA SWPB Piggy Back Webconnect.	1	160.00	160.00		
RS485Cable	RS485Cable 50Ft	1	75.00	75.00		
LA302R	Lightning Arrestor AC	1	40.00	40.00		
LA302DC	Lightning Arrestor DC	1	40.00	40.00		
MNPV6	MNPV6 Midnight Solar	1	101.53	101.53		
MNFUSE 15	15 Amps DC Fuse	2	8.00	16.00		
MNTS	Fuses holder	2	8.00	16.00		
Cable , 10AWG	PV OUTPUT-MC4 MALE & FEMALE 100FT	2	72.00	144.00		
PV-Unirac-SM	PV Mounting Unirac Solar Mount Roof Mounting Hardware for 24 panels, Includes SM Rails, L-feets, Grounding Lugs, Integrated Bonding End and Mid Clamps	1	1443.00	1443.00		
Total Cost of the materials without any incentives or rebates				\$8,041.53	\$ 1.34	per Watt
Sub Total Before Tax Credit				\$8,041.53		
Federal Tax Credit of 30%				-2412.459		
Other Local Incentives						
Total cost of the equipment after the tax credit				\$5,629.07	\$ 0.94	per Watt
Simple Payback Period for the materials only				6.05	Years	
<p>Note: All the products come with manufacturer warranty - 25 years for Solar Panels, 5 years for Inverter, 25 Years for Mounting etc. This system qualifies for IBC 2012 (Fire Class A compliance) - strongly recommended for residential roof-top solar in fire prone areas such as Sand Diego, Yosomite etc. The roof mount system is a flush mounted to the roof. The sacings is calculated based on the electricity cost of \$.10/KWH-AC</p>						
If you are from a place where the utility electric cost is different , than the payback period above will vary						
	If your rate is (\$/KWH)	Payback would be, after 30% Tax Credit				
	\$.15/KWH	4.03	Years			
	\$.20/KWH	3.02	Years			
<p>Additional incentives are available and maybe significant in CA, TX,FL, NY, MA, NH, GA, CO, WA,OR. Please go to http://www.dsireusa.org/ for more information regarding additional incentives.</p>						
If you need to customize this system a little bit or have questions regarding this please contact our engineers directly here						

6KW Micro-Inverter-SolarWorld

Panel Size	Qty	Total Wattage of the system				
240	25		6,000	Watts		
Total Cost of the equipment for the 6KW Micro-Inverter Grid-Tied PV system						
Item Code	DESCRIPTION	Quantity	Price Each	Amount		
SW240-Mono	Solar World 240 Watts, SW 240-Mono , A grade, UL	25	129.60	3240.00		
ET-10-240 BULK	Enphase Engage Trunk Cable, 1-PH, Continuous Length in Portrait (40")	25	19.00	475.00		
ET-INSTL	Enphase Energy ET-INSTL M215 Microinverter Install Kit	2	75.00	150.00		
M215-60-2LL-S22	Enphase, M215 Microinverter, 215W, 240/208VAC, 60Hz, 16-45VDC for 60 cell modules, H4 PV in, 16" Engage Cable out, 5 Yr Warr	25	127.80	3195.00		
ENV-120-01	Enphase, ENVOY communications gateway, with ethernet bridge pair	1	483.00	483.00		
008011S	Micro-inverter mounting kit	25	1.29	32.25		
PV-Unirac-SM	PV Mounting Unirac Solar Mount Roof Mounting Hardware for 24 panels, Includes SM Rails, L-feets, Grounding Lugs, Integrated Bonding End and Mid Clamps	1	1390.00	1390.00		
Total Cost of the materials without any incentives or rebates				\$8,965.25	\$ 1.49	per Watt
Sub Total Before Tax Credit				\$8,965.25		
Federal Tax Credit of 30%				-2689.575		
Other Local Incentives						
Total cost of the equipment after the tax credit				\$6,275.68	\$ 1.05	per Watt
Simple Payback Period for the materials only				6.74	Years	
<p>Note: All the products come with manufacturer warranty - 25 years for Solar Panels, 5 years for Inverter, 25 Years for Mounting etc. This system qualifies for IBC 2012 (Fire Class A compliance) - strongly recommended for residential roof-top solar in fire prone areas such as Sand Diego, Yosomite etc. The roof mount system is a flush mounted to the roof. The sacings is calculated based on the electricity cost of \$.10/KWH-AC</p>						
If you are from a place where the utility electric cost is different , than the payback period above will vary						
If your rate is (\$/KWH)		Payback would be, after 30% Tax Credit				

6KW Micro-Inverter-SolarWorld

	\$.15/KWH		4.50	Years			
	\$.20/KWH		3.37	Years			
<p>Additional incentives are available and maybe significant in CA, TX,FL, NY, MA, NH, GA, CO, WA,OR. Please go to http://www.dsireusa.org/ for more information regarding additional incentives.</p>							
<p>If you need to customize this system a little bit or have questions regarding this please contact our engineers directly here</p>							

10KW Micro-Inverter SolarWorld

Panel Size	Qty	Total Wattage of the system				
240	42		10,080	Watts		
Total Cost of the equipment for the 10.1KW Micro-Inverter Grid-Tied PV system						
Item Code	DESCRIPTION	Quantity	Price Each	Amount		
SW240-Mono	Solar World 240 Watts, SW 240-Mono , A grade, UL	42	129.60	5443.20		
ET-10-240 BULK	Enphase Engage Trunk Cable, 1-PH, Continuous Length in Portrait (40")	42	19.00	798.00		
ET-INSTL	Enphase Energy ET-INSTL M215 Microinverter Install Kit	3	75.00	225.00		
M215-60-2LL-S22	Enphase, M215 Microinverter, 215W, 240/208VAC, 60Hz, 16-45VDC for 60 cell modules, H4 PV in, 16" Engage Cable out, 5 Yr Warr	42	127.80	5367.60		
ENV-120-01	Enphase, ENVOY communications gateway, with ethernet bridge pair	1	483.00	483.00		
008011S	Micro-inverter mounting kit	1	1.29	1.29		
PV-Unirac-SM	PV Mounting Unirac Solar Mount Roof Mounting Hardware for 24 panels, Includes SM Rails, L-feets, Grounding Lugs, Integrated Bonding End and Mid Clamps	1	2110.00	2110.00		
Total Cost of the materials without any incentives or rebates				\$14,428.09	\$ 1.43	per Watt
Sub Total Before Tax Credit				\$14,428.09		
Federal Tax Credit of 30%				-4328.427		
Other Local Incentives						
Total cost of the equipment after the tax credit				\$10,099.66	\$ 1.00	per Watt
Simple Payback Period for the materials only				6.46	Years	
<p>Note: All the products come with manufacturer warranty - 25 years for Solar Panels, 5 years for Inverter, 25 Years for Mounting etc. This system qualifies for IBC 2012 (Fire Class A compliance) - strongly recommended for residential roof-top solar in fire prone areas such as Sand Diego, Yosomite etc. The roof mount system is a flush mounted to the roof. The sacings is calculated based on the electricity cost of \$.10/KWH-AC</p>						
If you are from a place where the utility electric cost is different , than the payback period above will vary						
If your rate is (\$/KWH)		Payback would be, after 30% Tax Credit				

10KW Micro-Inverter SolarWorld

	\$.15/KWH		4.31	Years			
	\$.20/KWH		3.23	Years			
<p>Additional incentives are available and maybe significant in CA, TX,FL, NY, MA, NH, GA, CO, WA,OR. Please go to http://www.dsireusa.org/ for more information regarding additional incentives.</p>							
<p>If you need to customize this system a little bit or have questions regarding this please contact our engineers directly here</p>							

4.7KW Micro-Inverter SolarWorld

Panel Size	Qty	Total Wattage of the system				
240	30		7,200	Watts		
Total Cost of the equipment for the 10.1KW Micro-Inverter Grid-Tied PV system						
Item Code	DESCRIPTION	Quantity	Price Each	Amount		
SW240-poly	Solar World 240 Watts, SW 240-Mono , A grade, UL	30	139.20	4176.00		
ET-10-240 BULK	Enphase Engage Trunk Cable, 1-PH, Continuous Length in Portrait (40")	31	19.00	589.00		
ET-INSTL	Enphase Energy ET-INSTL M215 Microinverter Install Kit	3	75.00	225.00		
M215-60-2LL-S22	Enphase, M215 Microinverter, 215W, 240/208VAC, 60Hz, 16-45VDC for 60 cell modules, H4 PV in, 16" Engage Cable out, 5 Yr Warr	30	128.00	3840.00		
ENV-120-01	Enphase, ENVOY communications gateway, with ethernet bridge pair	1	483.00	483.00		
008011S	Micro-inverter mounting kit	30	1.29	38.70		
PV-Unirac-SM	PV Mounting Unirac Solar Mount Roof Mounting Hardware for 24 panels, Includes SM Rails, L-feets, Grounding Lugs, Integrated Bonding End and Mid Clamps and Quickmount PV's Classic composition standoffs (roof attachments every 48" ; two rows of panels layout with 15 panels per row)	1	2850.00	2850.00		
Total Cost of the materials without any incentives or rebates				\$12,201.70	\$ 1.69	per Watt
Sub Total Before Tax Credit				\$12,201.70		
Federal Tax Credit of 30%				-3660.51		
Other Local Incentives						
Total cost of the equipment after the tax credit				\$8,541.19	\$ 1.19	per Watt
Simple Payback Period for the materials only				7.65	Years	
<p>Note: All the products come with manufacturer warranty - 25 years for Solar Panels, 5 years for Inverter, 25 Years for Mounting etc. This system qualifies for IBC 2012 (Fire Class A compliance) - strongly recommended for residential roof-top solar in fire prone areas such as Sand Diego, Yosomite etc. The roof mount system is a flush mounted to the roof. The sacings is calculated based on the electricity cost of \$.10/KWH-AC</p>						
If you are from a place where the utility electric cost is different , than the payback period above will vary						

4.7KW Micro-Inverter SolarWorld

	If your rate is (\$/KWH)	Payback would be, after 30% Tax Credit			
	\$.15/KWH		5.10 Years		
	\$.20/KWH		3.82 Years		
<p>Additional incentives are available and maybe significant in CA, TX,FL, NY, MA, NH, GA, CO, WA,OR. Please go to http://www.dsireusa.org/ for more information regarding additional incentives.</p> <p>If you need to customize this system a little bit or have questions regarding this please contact our engineers directly here</p>					

6.7KW Micro-Inverter Suniva280

Panel Size	Qty	Total Wattage of the system			
280	24	6,720	Watts		
Total Cost of the equipment for the 6.72KW Micro-Inverter Grid-Tied PV system					
Solar Panels and Roof-Mounting Hardware are all made in the USA					
Item Code	DESCRIPTION	Quantity	Price Each	Amount	
OPT280SW-210	280 Watts, Suniva Solar Panel, Mono, Silver, B, 60 Cells, UL, Made in USA	24	173.60	4166.40	
ET-10-240 BULK	Enphase Engage Trunk Cable, 1-PH, Continuous Length in Portrait (40")	24	19.00	456.00	
ET-INSTL	Enphase Energy ET-INSTL M215 and M250 Microinverter Install Kit	2	75.00	150.00	
M-250-60 2LL-S22	Enphase, M250 Microinverter, 250W, 240/208VAC, 60Hz, 16-45VDC for 60 cell modules, H4 PV in, 16" Engage Cable out, 5 Yr Warr	24	149.80	3595.20	
ENV-120-01	Enphase, ENVOY communications gateway, with ethernet bridge pair	1	483.00	483.00	
008011S	Micro-inverter mounting kit	1	1.29	1.29	
PV-Unirac-SM	PV Mounting Unirac Solar Mount Roof Mounting Hardware for 24 panels, Includes SM Rails, L-feets, Grounding Lugs, Integrated Bonding End and Mid Clamps	1	1410.00	1410.00	
Total Cost of the materials without any incentives or rebates				\$10,261.89	\$ 1.53 per Watt
Sub Total Before Tax Credit				\$10,261.89	
Federal Tax Credit of 30%				-3078.567	
Other Local Incentives					
Total cost of the equipment after the tax credit				\$7,183.32	\$ 1.07 per Watt
Simple Payback Period for the materials only				6.89	Years
<p>Note: All the products come with manufacturer warranty - 25 years for Solar Panels, 5 years for Inverter, 25 Years for Mounting etc. This system qualifies for IBC 2012 (Fire Class A compliance) - strongly recommended for residential roof-top solar in fire prone areas such as Sand Diego, Yosomite etc. The roof mount system is a flush mounted to the roof. The sacings is calculated based on the electricity cost of \$.10/KWH-AC</p>					
If you are from a place where the utility electric cost is different , than the payback period above will vary					

6.7KW Micro-Inverter Suniva280

	If your rate is (\$/KWH)	Payback would be, after 30% Tax Credit			
	\$.15/KWH	4.59	Years		
	\$.20/KWH	3.45	Years		
<p>Additional incentives are available and maybe significant in CA, TX, FL, NY, MA, NH, GA, CO, WA, OR. Please go to http://www.dsireusa.org/ for more information regarding additional incentives.</p> <p>If you need to customize this system a little bit or have questions regarding this please contact our engineers directly here</p>					

7.2KW Hybrid System Solar-World

Panel Size	Qty	Total Wattage of the system				
240	30		7,200	Watts		
7.2 KW Grid Tied W Battery Backup / Hybrid System / Off-Grid						
Cost of the equipment for the proposed PV system-7.2KW Grid Tied W Battery Backup / Hybrid Syst						
Item Code	DESCRIPTION	Quantity	Price Each	Amount		
SW240-Mono	Solar World 240 Watts, SW 240-Mono , A grade, UL	30	162.40	4872.00		
XW+6848	XW6848-120/240-60 Grid-Tie - Inverter/Charger - 6800 Watts - 120/240 Vac	1	2850.00	2850.00		
Conext Combox	Conext XW+ Combiner Box	1	350.00	350.00		
Conext XW+ PDP	Conext XW+ Power Distribution Panel	1	1005.00	1005.00		
XW MPPT 60	Schneider MPPT 60A 150V Charge Controller	2	500.00	1000.00		
XW Remote Control	System Control Panel for SW & XW	1	230.00	230.00		
XW- 60 AMPS Breakers	Xantrex AB 5628 160V 60 amp DC Br	4	19.00	76.00		
S-605(previously S-600)	Rolls Surrette Battery , Made in CANADA Lead Acid Deep Cycle Battery Rolls S-605 6V - 458 AH, 5yrs Warranty	16	357.00	5712.00		
BC-5, 4/0	5 foot battery/inverter cable 4/0	2	50	100		
BC-1, 4/0	1 foot battery cable 4/0	16	10	160		
LA302R	Lightning Arrestor AC	1	40.00	40.00		
LA302DC	Lightning Arrestor DC	1	40.00	40.00		
MNPV12	MNPV12 Midnight Solar	1	143.00	143.00		
MNEPV15	DinRails DC Breakers 15 Amps	8	10.00	80.00		
Cable , 10AWG	PV OUTPUT-MC4 MALE & FEMALE	8	35.00	280.00		
Total Cost of the materials without any incentives or rebates				\$16,938.00	\$ 2.35	per Watt
Sub Total Before Tax Credit				\$16,938.00		
Federal Tax Credit of 30%				-5081.4		
Other Local Incentives						
Total cost of the equipment after the tax credit				\$11,856.60	\$ 1.65	per Watt
Simple Payback Period for the materials only				10.62	Years	
The savings is calculated based on electricity cost of \$.10/KWH.						

7.2KW Hybrid System Solar-World

<p>**For this system and Off-Grid systems similar to this, the payback is almost instantaneous. It costs \$10,000 a mile to run a power lines, or if one is using a generator, it is the equivalent of approximately \$.50/KWH.</p>							
<p>If you are from a place where the utility electric cost is different , than the payback period above will vary</p>							
If your rate is	Payback would be, after 30% Tax Credit		Payback without 30% Tax credit				
\$.15/KWH	7.08	Years	10.11	Years			
\$.20/KWH	5.31	Years	7.58	Years			
\$.30/KWH	3.54	Years	5.06	Years			
\$.40/KWH, For Example HI, AK	2.65	Years	3.79	Years			
<p>Additional incentives are available and maybe significant in CA,TX,FL, NY, MA, NH, GA, CO, WA,OR. Please go to http://www.dsireusa.org/ for more information regarding additional incentives.</p>							
<p>If you need to customize this system a little bit or have questions regarding this please contact our engineers directly here</p>							

10KW Hybrid System Solar-World

Panel Size	Qty	Total Wattage of the system					
240	42		10,080	Watts			
10 KW Grid Tied W Battery Backup / Hybrid System / Off-Grid							
Cost of the equipment for the proposed PV system-7.2KW Grid Tied W Battery Backup / Hybrid System							
Item Code	DESCRIPTION	Quantity	Price Each	Amount			
SW240-Mono	Solar World 240 Watts, SW 240-Mono , A grade, UL	42	162.40	6820.80			
XW+6848	XW6848-120/240-60 Grid-Tie - Inverter/Charger - 6800 Watts - 120/240 Vac	2	2850.00	5700.00			
Conext Combox	Conext XW+ Combiner Box	1	350.00	350.00			
Conext XW+ PDP	Conext XW+ Power Distribution Panel	1	1005.00	1005.00			
XW Xonnection Kit	XW Connection Kit for 2nd XW inverter	1	650.00	650.00			
XW MPPT 60	Schneider MPPT 60A 150V Charge Controller [15,15 and 12 per each charge controller)	3	500.00	1500.00			
XW Remote Control	System Control Panel for SW & XW	1	230.00	230.00			
XW- 60 AMPS Breakers	Xantrex AB 5628 160V 60 amp DC Br	6	19.00	114.00			
S-605(previously S-600)	Rolls Surrette Battery , Made in CANADA Lead Acid Deep Cycle Battery Rolls S-605 6V - 458 AH, 5yrs Warranty	16	357.00	5712.00			
BC-5, 4/0	5 foot battery/inverter cable 4/0	2	50	100			
BC-1, 4/0	1 foot battery cable 4/0	16	10	160			
LA302R	Lightning Arrestor AC	1	40.00	40.00			
LA302DC	Lightning Arrestor DC	2	40.00	80.00			
MNPV12	MNPV12 Midnight Solar	1	143.00	143.00			
MNEPV15	DinRails DC Breakers 15 Amps	14	10.00	140.00			
MNPV6	Combiner Box MNPV6	1	101.00	101.00			
Cable , 10AWG	PV OUTPUT-MC4 MALE & FEMALE	14	35.00	490.00			
Total Cost of the materials without any incentives or rebates				\$23,335.80	\$ 2.32	per Watt	
Sub Total Before Tax Credit				\$23,335.80			
Federal Tax Credit of 30%				-7000.74			
Other Local Incentives							

10KW Hybrid System Solar-World

Total cost of the equipment after the tax credit				\$16,335.06	\$ 1.62 per Watt
Simple Payback Period for the materials only				10.45	Years
The savings is calculated based on electricity cost of \$.10/KWH.					
**For this system and Off-Grid systems similar to this, the payback is almost instantaneous. It costs \$10,000 a mile to run a power lines, or if one is using a generator, it is the equivalent of approximately \$.50/KWH.					
If you are from a place where the utility electric cost is different , than the payback period above will vary					
If your rate is	Payback would be, after 30% Tax Credit			Payback without 30% Tax credit	
\$.15/KWH	6.96	Years		9.95	Years
\$.20/KWH	5.22	Years		7.46	Years
\$.30/KWH	3.48	Years		4.97	Years
\$.40/KWH, For Example HI, AK	2.61	Years		3.73	Years
Additional incentives are available and maybe significant in CA,TX,FL, NY, MA, NH, GA, CO, WA,OR. Please go to http://www.dsireusa.org/ for more information regarding additional incentives.					
If you need to customize this system a little bit or have questions regarding this please contact our engineers directly here					

6.72KW Off-Grid

Panel Size	Qty	Total Wattage of the system			
280	22	6,160	Watts		
13.44 KW Off- Grid W Battery Backup / Hybrid System					
Cost of the equipment for the proposed PV system-13.44 KW Off-Grid W Battery Backup / Hybrid S					
Item Code	DESCRIPTION	Quantity	Price Each	Amount	
Suniva 280 Watt	SUNIVA 280 Watts, Grade-B, Crystalline, 60 Cells, UL, Made in USA, 25 Yrs Warranty	22	168.00	3696.00	
XW+6848	XW6848-120/240-60 Grid-Tie/Off-Grid - Inverter/Charger - 6800 Watts - 120/240 Vac	1	2850.00	2850.00	
Conext Combox	Conext XW+ Combiner Box	1	350.00	350.00	
Conext XW+ PDP	Conext XW+ Power Distribution Panel	1	1005.00	1005.00	
	XW Connection Kit for 2nd inverter	1	680.00	680.00	
XW MPPT 60	Schneider MPPT 60A 150V Charge Controller	2	500.00	1000.00	
XW Remote Control	System Control Panel for SW & XW	1	230.00	230.00	
XW- 60 AMPS Breakers	Xantrex AB 5628 160V 60 amp DC Br	4	19.00	76.00	
SUN-230AH	SUN 230 AH Battery, 6Volts, 1 Year Warranty	32	95.00	3040.00	
BC-5, 4/0	5 foot battery/inverter cable 4/0	2	50	100	
BC-1, 4/0	1 foot battery cable 4/0	34	10	340	
LA302R	Lightning Arrestor AC	1	40.00	40.00	
LA302DC	Lightning Arrestor DC	1	40.00	40.00	
MNPV12	MNPV12 Midnight Solar	1	143.00	143.00	
MNEPV15	DinRails DC Breakers 15 Amps	8	10.00	80.00	
Cable , 10AWG	PV OUTPUT-MC4 MALE & FEMALE	8	35.00	280.00	
Total Cost of the materials without any incentives or rebates				\$13,950.00	\$ 2.26 per Watt
Sub Total Before Tax Credit				\$13,950.00	
Federal Tax Credit of 30%				-4185	
Other Local Incentives					
Total cost of the equipment after the tax credit				\$9,765.00	\$ 1.59 per Watt

6.72KW Off-Grid

**For this system and Off-Grid systems similar to this, the payback is almost instantaneous. It costs \$10,000 a mile to run a power lines, or if one is using a generator, it is the equivalent of approximately \$.50/KWH.							
If you are from a place where the utility electric cost is different , than the payback period above will vary							
If your rate is	Payback would be, after 30% Tax Credit		Payback without 30% Tax credit				
\$.15/KWH	10.22	Years	9.73	Years			
\$.20/KWH	5.11	Years	7.30	Years			
\$.30/KWH	3.41	Years	4.87	Years			
\$.40/KWH, For Example HI, AK	2.55	Years	3.65	Years			
Additional incentives are available and maybe significant in CA,TX,FL, NY, MA, NH, GA, CO, WA,OR. Please go to http://www.dsireusa.org/ for more information regarding additional incentives.							
If you need to customize this system a little bit or have questions regarding this please contact our engineers directly here							

25KW Micro-Inverter Suniva280

Panel Size	Qty	Total Wattage of the system			
280	90	25,200	Watts		
Total Cost of the equipment for the 6.72KW Micro-Inverter Grid-Tied PV system					
Solar Panels and Roof-Mounting Hardware are all made in the USA					
Item Code	DESCRIPTION	Quantity	Price Each	Amount	
OPT280SW-210	280 Watts, Suniva Solar Panel, Mono, Silver, B, 60 Cells, UL, Made in USA	90	168.00	15120.00	
ET-10-240 BULK	Enphase Engage Trunk Cable, 1-PH, Continuous Length in Portrait (40")	90	18.00	1620.00	
ET-INSTL	Enphase Energy ET-INSTL M215 and M250 Microinverter Install Kit	2	75.00	150.00	
M-250-60 2LL-S22	Enphase, M250 Microinverter, 250W, 240/208VAC, 60Hz, 16-45VDC for 60 cell modules, H4 PV in, 16" Engage Cable out, 5 Yr Warr	90	140.80	12672.00	
ENV-120-01	Enphase, ENVOY communications gateway, with ethernet bridge pair	1	483.00	483.00	
008011S	Micro-inverter mounting kit	90	1.29	116.10	
PV-Unirac-SM	PV Mounting Unirac Solar Mount Roof Mounting Hardware for 24 panels, Includes SM Rails, L-feets, Grounding Lugs, Integrated Bonding End and Mid Clamps, Standoffs also included	1	6510.00	6510.00	
Total Cost of the materials without any incentives or rebates				\$36,671.10	\$ 1.46 per Watt
Sub Total Before Tax Credit				\$36,671.10	
Federal Tax Credit of 30%				-11001.33	
Other Local Incentives					
Total cost of the equipment after the tax credit				\$25,669.77	\$ 1.02 per Watt
Simple Payback Period for the materials only				6.57	Years
<p>Note: All the products come with manufacturer warranty - 25 years for Solar Panels, 5 years for Inverter, 25 Years for Mounting etc. This system qualifies for IBC 2012 (Fire Class A compliance) - strongly recommended for residential roof-top solar in fire prone areas such as Sand Diego, Yosomite etc. The roof mount system is a flush mounted to the roof. The sacings is calculated based on the electricity cost of \$.10/KWH-AC</p>					
If you are from a place where the utility electric cost is different , than the payback period above will vary					

25KW Micro-Inverter Suniva280

	If your rate is (\$/KWH)	Payback would be, after 30% Tax Credit			
	\$.15/KWH		4.38	Years	
	\$.20/KWH		3.28	Years	
<p>Additional incentives are available and maybe significant in CA, TX, FL, NY, MA, NH, GA, CO, WA, OR. Please go to http://www.dsireusa.org/ for more information regarding additional incentives.</p>					
<p>If you need to customize this system a little bit or have questions regarding this please contact our engineers directly here</p>					

13.7KW Hybrid

Panel Size	Qty	Total Wattage of the system			
280	48		13,440	Watts	
13.44 KW Off- Grid W Battery Backup / Hybrid System					
Cost of the equipment for the proposed PV system-13.44 KW Off-Grid W Battery Backup / Hybrid S					
Item Code	DESCRIPTION	Quantity	Price Each	Amount	
Suniva 280 Watt	SUNIVA 280 Watts, Grade-B, Crystalline, 60 Cells, UL, Made in USA, 25 Yrs Warranty	48	179.20	8601.60	
XW+6848	XW6848-120/240-60 Grid-Tie/Off-Grid - Inverter/Charger - 6800 Watts - 120/240 Vac	2	2850.00	5700.00	
Conext Combox	Conext XW+ Combiner Box	1	350.00	350.00	
Conext XW+ PDP	Conext XW+ Power Distribution Panel	1	1005.00	1005.00	
	XW Connection Kit for 2nd inverter	1	680.00	680.00	
XW MPPT 60	Schneider MPPT 60A 150V Charge Controller	4	500.00	2000.00	
XW Remote Control	System Control Panel for SW & XW	1	230.00	230.00	
XW- 60 AMPS Breakers	Xantrex AB 5628 160V 60 amp DC Br	8	19.00	152.00	
S-605(previously S-600)	Rolls Surrette Battery , Made in CANADA Lead Acid Deep Cycle Battery Rolls S-605 6V - 458 AH, 5yrs Warranty	24	357.00	8568.00	
BC-5, 4/0	5 foot battery/inverter cable 4/0	4	50	200	
BC-1, 4/0	1 foot battery cable 4/0	25	10	250	
LA302R	Lightning Arrestor AC	1	40.00	40.00	
LA302DC	Lightning Arrestor DC	2	40.00	80.00	
MNPV12	MNPV12 Midnight Solar	2	143.00	286.00	
MNEPV15	DinRails DC Breakers 15 Amps	16	10.00	160.00	
Cable , 10AWG	PV OUTPUT-MC4 MALE & FEMALE	16	35.00	560.00	
Total Cost of the materials without any incentives or rebates				\$28,862.60	\$ 2.15 per Watt
Sub Total Before Tax Credit				\$28,862.60	
Federal Tax Credit of 30%				-8658.78	
Other Local Incentives					
Total cost of the equipment after the tax credit				\$20,203.82	\$ 1.50 per Watt

13.7KW Hybrid

<p>**For this system and Off-Grid systems similar to this, the payback is almost instantaneous. It costs \$10,000 a mile to run a power lines, or if one is using a generator, it is the equivalent of approximately \$.50/KWH.</p>				
<p>If you are from a place where the utility electric cost is different , than the payback period above will vary</p>				
If your rate is	Payback would be, after 30% Tax Credit		Payback without 30% Tax credit	
\$.15/KWH	9.69	Years	9.23	Years
\$.20/KWH	4.85	Years	6.92	Years
\$.30/KWH	3.23	Years	4.61	Years
\$.40/KWH, For Example HI, AK	2.42	Years	3.46	Years
<p>Additional incentives are available and maybe significant in CA, TX, FL, NY, MA, NH, GA, CO, WA, OR. Please go to http://www.dsireusa.org/ for more information regarding additional incentives.</p>				
<p style="color: blue;">If you need to customize this system a little bit or have questions regarding this please contact our engineers directly here</p>				

Off-Grid System 2KW HE-SUN-220

2.2 KW Off-Grid System W Battery				
Cost of the components for the proposed PV system-2.2 KW Off-Grid System W Battery				
Item Code	DESCRIPTION	Quantity	Price Each	Amount
HE-SUN-220	HE-SUN-220	10	149.60	1496.00
IC122055	KISAE Abso SW Inverter Charger 2000W 55A - IC122055	1	406.88	406.88
MNEDC250	Midnite Solar Battery Disconnect, Battery Disconnect	1	89.00	89.00
C60	Schneider C60 Charge Controlle	1	149.00	149.00
MNEDC60 AMPS Breakers	60 amp DC Breaker	2	19.00	38.00
SUN 6V 230AH	SUN 6 Volt deep cycle - 230 Amp Hour Battery	8	97.00	776.00
BC-5, 1/0	5 foot battery/inverter cable 1/0	2	16	32
BC-1, 1/0	1 foot battery cable 1/0	4	8	32
MNPV12	MNPV12 Midnight Solar	1	143.00	143.00
MNEPV15	DinRails DC Breakers 15 Amps	8	10.00	80.00
Cable , 10AWG	PV OUTPUT-MC4 MALE & FEMALE 15FT and 6FT (4 of each)	8		150.00
Total Cost of the materials without any incentives or rebates				\$3,391.88
Sub Total Before Tax Credit				\$3,391.88
Federal Tax Credit of 30%				-1017.564
Other Local Incentives				-
Total cost of the components after the tax credit				\$2,374.32
Simple Payback Period for the materials only				**
<p>**For this system and Off-Grid systems similar to this, the payback is almost instantaneous. It costs \$10,000 a mile to run a power lines, or if one is using a generator, it is the equivalent of approximately \$.50/KWH.</p>				
<p>Note:</p> <p>1.) All the products come with manufacturer warranty</p> <p>2.)For the mounting system, please contact us</p>				
<p>Additional incentives are avaialbe and maybe significant in TX,FL, NY, MA, NH, GA, CO, WA,OR. Please go to http://www.dsireusa.org/ for more information regarding additional incentives.</p>				
<p>If you need to customize this system a little bit or have questions regarding this please contact our engineers directly here</p>				

Off-Grid System 3KW HE-SUN-220

1.2 KW Off-Grid System W Battery				
Cost of the components for the proposed PV system-1.2 KW Off-Grid System W Battery				
Item Code	DESCRIPTION	Quantity	Price Each	Amount
HE-SUN-220	HE-SUN-220	14	149.60	2094.40
SW1210	KISAE SW1210 1000W, 12V Pure Sine Wave Inverter	1	163.88	163.88
MNEDC250	Midnite Solar Battery Disconnect, Battery Disconnect	1	89.00	89.00
C60	Schneider C60 Charge Controlle	1	149.00	149.00
MNEDC60 AMPS Breakers	60 amp DC Breaker	2	19.00	38.00
SUN 6V 230AH	SUN 6 Volt deep cycle - 230 Amp Hour Battery	4	97.00	388.00
BC-5, 1/0	5 foot battery/inverter cable 1/0	2	16	32
BC-1, 1/0	1 foot battery cable 1/0	4	8	32
MNPV12	MNPV12 Midnight Solar	1	143.00	143.00
MNEPV15	DinRails DC Breakers 15 Amps	8	9.50	76.00
Cable , 10AWG	PV OUTPUT-MC4 MALE & FEMALE	8	25.00	200.00
Total Cost of the materials without any incentives or rebates				\$3,405.28
Sub Total Before Tax Credit				\$3,405.28
Federal Tax Credit of 30%				-1021.584
Other Local Incentives				-
Total cost of the components after the tax credit				\$2,383.70
Simple Payback Period for the materials only				**
<p>**For this system and Off-Grid systems similar to this, the payback is almost instantaneous. It costs \$10,000 a mile to run a power lines, or if one is using a generator it is the equivalent of approximately \$.50/KWH.</p>				
<p>Note:</p> <p>1.) All the products come with manufacturer warranty</p> <p>2.)For the mounting system, please contact us</p>				
<p>Additional incentives are avaialbe and maybe significant in TX,FL, NY, MA, NH, GA, CO, WA,OR. Please go to http://www.dsireusa.org/ for more information regarding additional incentives.</p>				
<p>If you need to customize this system a little bit or have questions regarding this please contact our engineers directly here</p>				

Copy of 6.72KW Off-Grid

Panel Size	Qty	Total Wattage of the system			
280	22	6,160	Watts		
13.44 KW Off- Grid W Battery Backup / Hybrid System					
Cost of the equipment for the proposed PV system-13.44 KW Off-Grid W Battery Backup / Hybrid S					
Item Code	DESCRIPTION	Quantity	Price Each	Amount	
Suniva 280 Watt	SUNIVA 280 Watts, Grade-B, Crystalline, 60 Cells, UL, Made in USA, 25 Yrs Warranty	22	168.00	3696.00	
XW+6848	XW6848-120/240-60 Grid-Tie/Off-Grid - Inverter/Charger - 6800 Watts - 120/240 Vac	1	2850.00	2850.00	
Conext Combox	Conext XW+ Combiner Box	1	350.00	350.00	
Conext XW+ PDP	Conext XW+ Power Distribution Panel	1	1005.00	1005.00	
	XW Connection Kit for 2nd inverter	1	680.00	680.00	
XW MPPT 60	Schneider MPPT 60A 150V Charge Controller	2	500.00	1000.00	
XW Remote Control	System Control Panel for SW & XW	1	230.00	230.00	
XW- 60 AMPS Breakers	Xantrex AB 5628 160V 60 amp DC Br	4	19.00	76.00	
SUN-230AH	SUN 230 AH Battery, 6Volts, 1 Year Warranty	16	327.00	5232.00	
BC-5, 4/0	5 foot battery/inverter cable 4/0	2	50	100	
BC-1, 4/0	1 foot battery cable 4/0	16	10	160	
LA302R	Lightning Arrestor AC	1	40.00	40.00	
LA302DC	Lightning Arrestor DC	1	40.00	40.00	
MNPV12	MNPV12 Midnight Solar	1	143.00	143.00	
MNEPV15	DinRails DC Breakers 15 Amps	8	10.00	80.00	
Cable , 10AWG	PV OUTPUT-MC4 MALE & FEMALE	8	35.00	280.00	
Total Cost of the materials without any incentives or rebates				\$15,962.00	\$ 2.59 per Watt
Sub Total Before Tax Credit				\$15,962.00	
Federal Tax Credit of 30%				-4788.6	
Other Local Incentives					
Total cost of the equipment after the tax credit				\$11,173.40	\$ 1.81 per Watt

Copy of 6.72KW Off-Grid

**For this system and Off-Grid systems similar to this, the payback is almost instantaneous. It costs \$10,000 a mile to run a power lines, or if one is using a generator, it is the equivalent of approximately \$.50/KWH.							
If you are from a place where the utility electric cost is different , than the payback period above will vary							
If your rate is	Payback would be, after 30% Tax Credit		Payback without 30% Tax credit				
\$.15/KWH	11.69	Years	11.14	Years			
\$.20/KWH	5.85	Years	8.35	Years			
\$.30/KWH	3.90	Years	5.57	Years			
\$.40/KWH, For Example HI, AK	2.92	Years	4.18	Years			
Additional incentives are available and maybe significant in CA,TX,FL, NY, MA, NH, GA, CO, WA,OR. Please go to http://www.dsireusa.org/ for more information regarding additional incentives.							
If you need to customize this system a little bit or have questions regarding this please contact our engineers directly here							

Off-Grid Sharp HE SUN 220_3.3KW

3.3 KW Off-Grid System W Battery				
Cost of the components for the proposed PV system-3.3 KW Grid Tied W Battery Backup / Hybrid Sy				
Item Code	DESCRIPTION	Quantity	Price Each	Amount
HE-SUN-220	HE-SUN-220, Mono Crystalline 21% efficient, 61.3"x 31.4"	15	149.60	2244.00
SW4024	XW4024-120/240-60 Off-Grid - Inverter/Charger - 4000Watts - 120/240 Vac	1	1350.00	1350.00
Conext Combox	Conext XW+ Combiner Box , Online Monitoring of the system	1	350.00	350.00
MNDC250	Midnite Solar Mini Disconnect, Battery Disconnect	1	184.00	184.00
XW MPPT 60	Schneider MPPT 60A 150V Charge Controller	2	500.00	1000.00
SW Remote Control	System Control Panel for SW & XW	1	230.00	230.00
XW- 60 AMPS Breakers	Xantrex AB 5628 160V 60 amp DC Br	4	19.00	76.00
SUN 6V 230AH	SUN 6 Volt deep cycle - 230 Amp Hour Battery	16	105.00	1680.00
BC-5, 2/0	5 foot battery/inverter cable 4/0	2	40	80
BC-1, 2/0	1 foot battery cable 4/0	16	8	128
LA302R	Lightning Arrestor AC	1	40.00	40.00
LA302DC	Lightning Arrestor DC	1	40.00	40.00
MNPV12	MNPV12 Midnight Solar	1	143.00	143.00
MNEPV15	DinRails DC Breakers 15 Amps	8	10.00	80.00
Cable , 10AWG	PV OUTPUT-MC4 MALE & FEMALE	8	35.00	280.00
Total Cost of the materials without any incentives or rebates				\$7,905.00
Sub Total Before Tax Credit				\$7,905.00
Federal Tax Credit of 30%				-2371.5
Other Local Incentives				-
Total cost of the components after the tax credit				\$5,533.50
Simple Payback Period for the materials only				**
**For this system and Off-Grid systems similar to this, the payback is almost instantaneous. It costs \$10,000 a mile to run a power lines, or if one is using a generator it is the equivalent of approximately \$.50/KWH.				
Note:				
1.) All the products come with manufacturer warranty				

kwh	\$
6752.5	742.775

15

3300

Off-Grid System for \$1776

1.2 KW Off-Grid System W Battery				
Cost of the components for the proposed PV system-1.2 KW Off-Grid System W Battery				
Item Code	DESCRIPTION	Quantity	Price Each	Amount
RND-42AT-A 42 Cell	Sharp 153 Watts, Grade-B	8	58.14	465.12
SW1210	KISAE SW1210 1000W, 12V Pure Sine Wave Inverter	1	163.88	163.88
MNEDC250	Midnite Solar Battery Disconnect, Battery Disconnect	1	89.00	89.00
C60	Schneider C60 Charge Controlle	1	149.00	149.00
MNEDC60 AMPS Breakers	60 amp DC Breaker	2	19.00	38.00
SUN 6V 230AH	SUN 6 Volt deep cycle - 230 Amp Hour Battery	4	97.00	388.00
BC-5, 1/0	5 foot battery/inverter cable 1/0	2	16	32
BC-1, 1/0	1 foot battery cable 1/0	4	8	32
MNPV12	MNPV12 Midnight Solar	1	143.00	143.00
MNEPV15	DinRails DC Breakers 15 Amps	8	9.50	76.00
Cable , 10AWG	PV OUTPUT-MC4 MALE & FEMALE	8	25.00	200.00
Total Cost of the materials without any incentives or rebates				\$1,776.00
Sub Total Before Tax Credit				\$1,776.00
Federal Tax Credit of 30%				-532.8
Other Local Incentives				-
Total cost of the components after the tax credit				\$1,243.20
Simple Payback Period for the materials only				**
<p>**For this system and Off-Grid systems similar to this, the payback is almost instantaneous. It costs \$10,000 a mile to run a power lines, or if one is using a generator it is the equivalent of approximately \$.50/KWH.</p>				
<p>Note:</p> <p>1.) All the products come with manufacturer warranty</p> <p>2.)For the mounting system, please contact us</p>				
<p>Additional incentives are avaiable and maybe significant in TX,FL, NY, MA, NH, GA, CO, WA,OR. Please go to http://www.dsireusa.org/ for more information regarding additional incentives.</p>				
<p>If you need to customize this system a little bit or have questions regarding this please contact our engineers directly here</p>				

Off-Grid System for \$1973

1.2 KW Off-Grid System W Battery				
Cost of the components for the proposed PV system-1.2 KW Off-Grid System W Battery				
Item Code	DESCRIPTION	Quantity	Price Each	Amount
RND-42AT-A 42 Cell	Sharp 153 Watts, Grade-B	8	58.14	465.12
IC122055	KISAE Abso SW Inverter Charger 2000W 55A - IC122055	1	406.88	406.88
MNEDC250	Midnite Solar Battery Disconnect, Battery Disconnect	1	89.00	89.00
C60	Schneider C60 Charge Controlle	1	149.00	149.00
MNEDC60 AMPS Breakers	60 amp DC Breaker	2	19.00	38.00
SUN 6V 230AH	SUN 6 Volt deep cycle - 230 Amp Hour Battery	4	97.00	388.00
BC-5, 1/0	5 foot battery/inverter cable 1/0	2	16	32
BC-1, 1/0	1 foot battery cable 1/0	4	8	32
MNPV12	MNPV12 Midnight Solar	1	143.00	143.00
MNEPV15	DinRails DC Breakers 15 Amps	8	10.00	80.00
Cable , 10AWG	PV OUTPUT-MC4 MALE & FEMALE 15FT and 6FT (4 of each)	8		150.00
Total Cost of the materials without any incentives or rebates				\$1,973.00
Sub Total Before Tax Credit				\$1,973.00
Federal Tax Credit of 30%				-591.9
Other Local Incentives				-
Total cost of the components after the tax credit				\$1,381.10
Simple Payback Period for the materials only				**
**For this system and Off-Grid systems similar to this, the payback is almost instantaneous. It costs \$10,000 a mile to run a power lines, or if one is using a generator, it is the equivalent of approximately \$.50/KWH.				
Note:				
1.) All the products come with manufacturer warranty				
2.)For the mounting system, please contact us				
Additional incentives are avaialbe and maybe significant in TX,FL, NY, MA, NH, GA, CO, WA,OR. Please go to http://www.dsireusa.org/ for more information regarding additional incentives.				

Off-Grid Sharp 153 _3.7KW

3.7 KW Off-Grid System W Battery							
Cost of the components for the proposed PV system-7.3 KW Grid Tied W Battery Backup / Hybrid Sy							
Item Code	DESCRIPTION	Quantity	Price Each	Amount		kwh	\$
RND-42AT-A 42 Cell	Sharp 153 Watts, Grade-B	24	58.14	1395.36		6752.5	742.775
SW4024	XW4024-120/240-60 Off-Grid - Inverter/Charger - 4000Watts - 120/240 Vac	1	1350.00	1350.00			
Conext Combox	Conext XW+ Combiner Box , Online Monitoring of the system	1	350.00	350.00			
MNDC250	Midnite Solar Mini Disconnect, Battery Disconnect	1	184.00	184.00			
XW MPPT 60	Schneider MPPT 60A 150V Charge Controller	2	500.00	1000.00			
SW Remote Control	System Control Panel for SW & XW	1	230.00	230.00			
XW- 60 AMPS Breakers	Xantrex AB 5628 160V 60 amp DC Br	4	19.00	76.00			
SUN 6V 230AH	SUN 6 Volt deep cycle - 230 Amp Hour Battery	16	105.00	1680.00			
BC-5, 2/0	5 foot battery/inverter cable 4/0	2	40	80			
BC-1, 2/0	1 foot battery cable 4/0	16	8	128			
LA302R	Lightning Arrestor AC	1	40.00	40.00			
LA302DC	Lightning Arrestor DC	1	40.00	40.00			
MNPV12	MNPV12 Midnight Solar	1	143.00	143.00			
MNEPV15	DinRails DC Breakers 15 Amps	8	10.00	80.00			
Cable , 10AWG	PV OUTPUT-MC4 MALE & FEMALE	8	35.00	280.00			
Total Cost of the materials without any incentives or rebates				\$7,056.36			
Sub Total Before Tax Credit				\$7,056.36			
Federal Tax Credit of 30%				-2116.908			
Other Local Incentives				-			
Total cost of the components after the tax credit				\$4,939.45			
Simple Payback Period for the materials only				**			
<p>**For this system and Off-Grid systems similar to this, the payback is almost instantaneous. It costs \$10,000 a mile to run a power lines, or if one is using a generator it is the equivalent of approximately \$.50/KWH.</p>							

Off-Grid Sharp 153 _3.7KW

Note:								
1.) All the products come with manufacturer warranty								
2.)For the mounting system, please contact us								
Additional incentives are available and maybe significant in TX,FL, NY, MA, NH, GA, CO, WA,OR. Please go to http://www.dsireusa.org/ for more information regarding additional incentives.								
If you need to customize this system a little bit or have questions regarding this please contact our engineers directly here								

Grid-Tied W Battery 7.3KW6848

7.3 KW Grid Tied W Battery Backup / Hybrid System					
The expected revenue that the electricity generated					
	Annual Average - Solar Radiation (kWh/m 2/day)	AC Energy (kWh)	Energy Value (\$)		
	5.00	10,323.17	\$ 1,032.32		
**The calculation above is done using the DC to AC derate factor of .85 as Suggested by PV Watts from NREL					
Cost of the equipment for the proposed PV system-6.7 KW Grid Tied W Battery Backup / Hybrid Sys					
Item Code	DESCRIPTION	Quantity	Price Each	Amount	
SUN 305	CSUN 305 Watts, Grade-B, Crystalline, 72 Cells, UL	22	131.15	2885.30	
XW+6848	XW6848-120/240-60 Grid-Tie - Inverter/Charger - 6800 Watts - 120/240 Vac	1	2850.00	2850.00	
Conext Combox	Conext XW+ Combiner Box	1	350.00	350.00	
Conext XW+ PDP	Conext XW+ Power Distribution Panel	1	1005.00	1005.00	
XW MPPT 60	Schneider MPPT 60A 150V Charge Controller	2	500.00	1000.00	
XW Remote Control	System Control Panel for SW & XW	1	230.00	230.00	
XW- 60 AMPS Breakers	Xantrex AB 5628 160V 60 amp DC Br	4	19.00	76.00	
S-605(Previously S-600)	Rolls Surrette Battery , Made in CANADA Lead Acid Deep Cycle Battery Rolls S-605 6V - 458 AH, 5yrs Warranty	16	357.00	5712.00	
BC-5, 4/0	5 foot battery/inverter cable 4/0	2	50	100	
BC-1, 4/0	1 foot battery cable 4/0	16	10	160	
LA302R	Lightning Arrestor AC	1	40.00	40.00	
LA302DC	Lightning Arrestor DC	1	40.00	40.00	
MNPV12	MNPV12 Midnight Solar	1	143.00	143.00	
MNEPV15	DinRails DC Breakers 15 Amps	8	10.00	80.00	
Cable , 10AWG	PV OUTPUT-MC4 MALE & FEMALE	8	35.00	280.00	
Total Cost of the materials without any incentives or rebates				\$14,951.30	\$ 2.23 per Watt
Sub Total Before Tax Credit				\$14,951.30	
Federal Tax Credit of 30%				-4485.39	

Grid-Tied W Battery 7.3KWXW6848

Other Local Incentives					
Total cost of the equipment after the tax credit			\$10,465.91	\$ 1.56 per Watt	
Simple Payback Period for the materials only			10.14	Years	
Note:					
1.) All the products come with manufacturer warranty					
2.) For the mounting system, please contact us					
3.) The savings is calculated based on electricity cost of \$.10/KWH.					
If you are from a place where the utility electric cost is different , than the payback period above will vary					
If your rate is	Payback would be, after 30% Tax Credit		Payback without 30% Tax credit		
\$.15/KWH	6.76	Years	9.66	Years	
\$.20/KWH	5.07	Years	7.24	Years	
\$.30/KWH	3.38	Years	4.83	Years	
\$.40/KWH, For Example HI, AK	2.53	Years	3.62	Years	
Additional incentives are available and maybe significant in TX,FL, NY, MA, NH, GA, CO, WA,OR. Please go to http://www.dsireusa.org/ for more information regarding additional incentives.					
If you need to customize this system a little bit or have questions regarding this please contact our engineers directly here					

6.7KW CSUN W Mounting



Sun Electronics International	Customer R	NA
Phone: 305-536-9917	Date:	1/1/2016
Email: info@sunelec.com		

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Contact Information

Project Name	Grid Tied PV System, 6.72KW						
Customer Name	First Last						
Address	ABC Drive, ABC City, FL 34984						
Contact Person	First Last						
Phone Number	000.000.0000						

Objective / Customer Requirements

Sample...

The objective of the customer was to use the full advantage of 30% ITC. Based on the space availability on the customers roof, 6.7KW Grid-Tied PV System with Roof Mounting is suggested. The objective also is to monitor the system performance over the internet.

Resources Used

Sample...

Based on the description of the site by the customer, the preliminary shading analysis was performed using Google SketchUp, and/or AutoCAD and/or Google Earth. PVWATTS v.2 was used to obtain overall derate factor and the total revenue generated by the system. The default derate factor available at PVWATTS v.2 was customized because of the tilt angle and the inverter efficiency.

Proposed System Information

System Type	Grid Tied with Roof Mounting						
System Size	6.7 Kilowatts						
Solar Panel	Suniva Solar Panels -280W						
Inverter	SMA, 6KW Grid-Tied Inverter						

6.7KW CSUN W Mounting

PVWATTS v.2 Analysis					
Site Informaiton					
City: (Weather Source Data)	(TMY2) WEST PALM BEACH, FL 41 mi				
State:	Florida				
Latitude:	26.68° N				
Longitude:	80.10° W				
PV System Specifications					
DC Rating:	6.7KW				
DC to AC Derate factor	0.8428				
Array Type:	Fixed Tilt /Roof Mount				
Array Tilt:	20°				
Array Azimuth:	180.0° Perfectly South Facing				
The expected revenue that the electricity generated					
Month	Solar Radiation (kWh/m 2/day)	AC Energy (kWh)	Energy Value (\$)		
January	4.37	723	75		
February	4.85	725	75		
March	5.51	891	93		
April	5.82	902	94		
May	5.65	911	95		
June	5.33	817	85		
July	5.61	885	92		
August	5.57	879	91		
September	5.27	806	84		
October	4.88	777	81		
November	4.39	691	72		
December	4.09	677	70		
Year	5.11	9684	\$ 1,007.00		

6.7KW CSUN W Mounting

Total Cost of the equipment for 6.7KW Grit-Tied System W Mounting					
Item Code	DESCRIPTION	Quantity	Price Each	Amount	
SUN 305	CSUN 305 Watts, Crystalline (Grade B) 72 Cells, UL	22	131.15	2885.30	
SB6000US-US-TL-22	SB6000US-TL-22 SMA grid-tied inverter 6KW, 1.5KW Emergency Outlet	1	2766.00	2766.00	
SMA SWPB	SMA SWPB Piggy Back Webconnect.	1	160.00	160.00	
RS485Cable	RS485Cable 50Ft	1	75.00	75.00	
LA302R	Lightning Arrestor AC	1	40.00	40.00	
LA302DC	Lightning Arrestor DC	1	40.00	40.00	
MNPV6	MNPV6 Midnight Solar	1	101.53	101.53	
MNFUSE 15	15 Amps DC Fuse	2	8.00	23.61	
MNTS	Fuses holder	2	8.00	23.61	
Cable , 10AWG	PV OUTPUT-MC4 MALE & FEMALE	2	72.00	144.00	
PV-Unirac-SM	PV Mounting Unirac Solar Mount Roof Mounting Hardware for 24 panels, Includes SM Rails, L-feets, Grounding Lugs, Integrated Bonding End and Mid Clamps	1	1332.00	1332.00	
Total Cost of the materials without any incentives or rebates				\$7,591.05	\$ 1.13 per Watt
Sub Total Before Tax Credit				\$7,591.05	
Federal Tax Credit of 30%				-2277.315	
Other Local Incentives					
Total cost of the equipment after the tax credit				\$5,313.74	\$ 0.79 per Watt
Simple Payback Period for the materials only				5.28	Years
Note:					
1.) All the products come with manufacturer warranty					
2.)The roof mount system is a flush mount					
3.) The savings is calculated based on electricity cost of \$.10/KWH.					

6.7KW CSUN W Mounting

If you are from a place where the utility electric cost is different , than the payback period above will vary				
	If your rate is (\$/KWH)	Payback would be, after 30% Tax Credit		
	\$.15/KWH	3.52	Years	
	\$.20/KWH	2.64	Years	
Additional incentives are available and maybe significant in TX,FL, NY, MA, NH, GA, CO, WA,OR. Please go to http://www.dsireusa.org/ for more information regarding additional incentives.				
If you need to customize this system a little bit or have questions regarding this please contact our engineers directly here				

6.7KW Suniva WO Mounting



Customer R NA
Date: 1/1/2016

Sun Electronics International
Phone: 305-536-9917
Email: info@sunelec.com

Contact Information

Project Name Grid Tied PV System, 6.72KW
Customer Name First Last
Address ABC Drive, ABC City, FL 34984
Contact Person First Last
Phone Number [000.000.0000](tel:000.000.0000)

Objective / Customer Requirements

Sample...

The objective of the customer was to use the full advantage of 30% ITC. Based on the space availability on the customers roof, 6720Watts Grid-Tied PV System with Roof Mounting is suggested. The objective also is to monitor the system performance over the internet.

Resources Used

Sample...

Based on the description of the site by the customer, the preliminary shading analysis was performed using Google SketchUp, and/or AutoCAD and/or Google Earth. PVWATTS v.2 was used to obtain overall derate factor and the total revenue generated by the system. The default derate factor available at PVWATTS v.2 was customized because of the tilt angle and the inverter efficiency.

Proposed System Information

Solar Panels , Inverter and Roof-Mounting Hardware are all made in the USA

System Type Grid Tied with Roof Mounting
System Size 6.72 Kilowatts
Solar Panel Suniva Solar Panels -280W
Inverter SMA, 6KW Grid-Tied Inverter

6.7KW Suniva WO Mounting

PVWATTS v.2 Analysis			
Site Informaiton			
City: (Wheather Source Data)	(TMY2) WEST PALM BEACH, FL 41 mi		
State:	Florida		
Latitude:	26.68° N		
Longitude:	80.10° W		
PV System Specifications			
DC Rating:	6.72KW		
DC to AC Derate factor	0.8428		
Array Type:	Fixed Tilt /Roof Mount		
Array Tilt:	20°		
Array Azimuth:	180.0° Perfectly South Facing		
The expected revenue that the electricity generated			
Month	Solar Radiation (kWh/m 2/day)	AC Energy (kWh)	Energy Value (\$)
January	4.37	723	75
February	4.85	725	75
March	5.51	891	93
April	5.82	902	94
May	5.65	911	95
June	5.33	817	85
July	5.61	885	92
August	5.57	879	91
September	5.27	806	84
October	4.88	777	81
November	4.39	691	72
December	4.09	677	70
Year	5.11	9684	\$ 1,007.00

6.7KW Suniva WO Mounting

Total Cost of the equipment for the proposed PV system					
Solar Panels , Inverter and Roof-Mounting Hardware are all made in the USA					
Item Code	DESCRIPTION	Quantity	Price Each	Amount	
OPT280SW-210	280 Watts, Suniva Solar Panel, Mono, Silver, B, 60 Cells, UL, Made in USA	24	190.40	4569.60	
SB6000US-US-TL-22	SB6000US-TL-22 SMA grid-tied inverter 6KW, 1.5KW Emergency Outlet	1	2766.00	2766.00	
SMA SWPB	SMA SWPB Piggy Back Webconnect.	1	160.00	160.00	
RS485Cable	RS485Cable 50Ft	1	75.00	75.00	
LA302R	Lightning Arrestor AC	1	40.00	40.00	
LA302DC	Lightning Arrestor DC	1	40.00	40.00	
MNPV6	MNPV6 Midnight Solar	1	101.53	101.53	
MNFUSE 15	15 Amps DC Fuse	2	8.00	16.00	
MNTS	Fuses holder	2	8.00	16.00	
Cable , 10AWG	PV OUTPUT-MC4 MALE & FEMAL	2	72.00	144.00	
Total Cost of the materials without any incentives or rebates				\$7,928.13	\$ 1.18 per Watt
Sub Total Before Tax Credit				\$7,928.13	
Federal Tax Credit of 30%				-2378.439	
Other Local Incentives					
Total cost of the equipment after the tax credit				\$5,549.69	\$ 0.83 per Watt
Simple Payback Period for the materials only				5.51	Years
Note:					
1.) All the products come with manufacturer warranty - 25 years for Solar Panels, 5 years for Inverter, 25 Years for Mounting etc. This system qualifies for IBC 2012 (Fire Class A compliance) - strongly recommended for residential roof-top solar in fire prone areas such as Sand Diego, Yosomite etc. The sacings is calculated based on the electricity cost of \$.10/KWH-AC					
If you are from a place where the utility electric cost is different , than the payback period above will vary					

6.7KW Suniva WO Mounting

	If your rate is (\$/KWH)	Payback would be, after 30% Tax Credit			
	\$.15/KWH		3.67	Years	
	\$.20/KWH		2.76	Years	
<p>Additional incentives are available and maybe significant in TX,FL, NY, MA, NH, GA, CO, WA,OR. Please go to http://www.dsireusa.org/ for more information regarding additional incentives.</p>					
<p>If you need to customize this system a little bit or have questions regarding this please contact our engineers directly here</p>					

6.7KW Suniva W Mounting



Sun Electronics International	Customer R	NA
Phone: 305-536-9917	Date:	1/1/2016
Email: info@sunelec.com		

Contact Informaiton

Project Name	Grid Tied PV System, 6.72KW
Customer Nam	First Last
Address	ABC Drive, ABC City, FL 34984
Contact Person	First Last
Phone Number	000.000.0000

Objective / Customer Requirements

Sample...
 The objective of the customer was to use the full advantage of 30% ITC. Based on the space availability on the customers roof, 6720Watts Grid-Tied PV System with Roof Mounting is suggested. The objective also is to monitor the system performance over the internet.

Resources Used

Sample...
 Based on the description of the site by the customer, the preliminary shading analysis was performed using Google SketchUp, and/or AutoCAD and/or Google Earth. PVWATTS v.2 was used to obtain overall derate factor and the total revenue generated by the system. The default derate factor available at PVWATTS v.2 was customized because of the tilt angle and the inverter efficiency.

Proposed System Informaiton

Solar Panels , Inverter and Roof-Mounting Hardware are all made in the USA

System Type	Grid Tied with Roof Mounting
System Size	6.72 Kilowatts
Solar Panel	Suniva Solar Panels -280W
Inverter	SMA, 6KW Grid-Tied Inverter

6.7KW Suniva W Mounting

PVWATTS v.2 Analysis			
Site Informaiton			
City: (Weather Source Data)	(TMY2) WEST PALM BEACH, FL 41 mi		
State:	Florida		
Latitude:	26.68° N		
Longitude:	80.10° W		
PV System Specifications			
DC Rating:	6.72KW		
DC to AC Derate factor	0.8428		
Array Type:	Fixed Tilt /Roof Mount		
Array Tilt:	20°		
Array Azimuth:	180.0° Perfectly South Facing		
The expected revenue that the electricity generated			
Month	Solar Radiation (kWh/m 2/day)	AC Energy (kWh)	Energy Value (\$)
January	4.37	723	75
February	4.85	725	75
March	5.51	891	93
April	5.82	902	94
May	5.65	911	95
June	5.33	817	85
July	5.61	885	92
August	5.57	879	91
September	5.27	806	84
October	4.88	777	81
November	4.39	691	72
December	4.09	677	70
Year	5.11	9684	\$ 1,007.00

6.7KW Suniva W Mounting

Total Cost of the equipment for the proposed PV system					
Solar Panels , Inverter and Roof-Mounting Hardware are all made in the USA					
Item Code	DESCRIPTION	Quantity	Price Each	Amount	
OPT280SW-210	280 Watts, Suniva Solar Panel, Mono, Silver, B, 60 Cells, UL, Made in USA	24	190.40	4569.60	
SB6000US-US-TL-22	SB6000US-TL-22 SMA grid-tied inverter 6KW, 1.5KW Emergency Outlet	1	2766.00	2766.00	
SMA SWPB	SMA SWPB Piggy Back Webconnect.	1	160.00	160.00	
RS485Cable	RS485Cable 50Ft	1	75.00	75.00	
LA302R	Lightning Arrestor AC	1	40.00	40.00	
LA302DC	Lightning Arrestor DC	1	40.00	40.00	
MNPV6	MNPV6 Midnight Solar	1	101.53	101.53	
MNFUSE 15	15 Amps DC Fuse	2	8.00	16.00	
MNTS	Fuses holder	2	8.00	16.00	
Cable , 10AWG	PV OUTPUT-MC4 MALE & FEMALE	2	72.00	144.00	
PV-Unirac-SM	PV Mounting Unirac Solar Mount Roof Mounting Hardware for 24 panels, Includes SM Rails, L-feets, Grounding Lugs, Integrated Bonding End and Mid Clamps	1	1443.00	1443.00	
Total Cost of the materials without any incentives or rebates				\$9,371.13	\$ 1.39 per Watt
Sub Total Before Tax Credit				\$9,371.13	
Federal Tax Credit of 30%				-2811.339	
Other Local Incentives					
Total cost of the equipment after the tax credit				\$6,559.79	\$ 0.98 per Watt
Simple Payback Period for the materials only				6.51	Years

6.7KW Suniva W Mounting

Note: All the products come with manufacturer warranty - 25 years for Solar Panels, 5 years for Inverter, 25 Years for Mounting etc. This system qualifies for IBC 2012 (Fire Class A compliance) - strongly recommended for residential roof-top solar in fire prone areas such as Sand Diego, Yosomite etc. The roof mount system is a flush mounted to the roof. The sacings is calculated based on the electricity cost of \$.10/KWH-AC

If you are from a place where the utility electric cost is different , than the payback period above will vary

If your rate is (\$/KWH)	Payback would be, after 30% Tax Credit	
\$.15/KWH	4.34	Years
\$.20/KWH	3.26	Years

Additional incentives are avaialbe and maybe significant in TX,FL, NY, MA, NH, GA, CO, WA,OR. Please go to <http://www.dsireusa.org/> for more information regarding additional incentives.

If you need to customize this system a little bit or have questions regarding this please contact our engineers directly here

13.4KW JASolar W Mounting

The expected annual revenue from the electricity generated				
Month	Solar Radiation (kWh/m 2/day)	AC Energy (kWh)	Energy Value (\$)	
Year	6.00	2483607 1.68	\$ 2,483.61	
Total Cost of the equipment for the proposed PV system				
Item Code	DESCRIPTION	Quantity	Price Each	Amount
JAP6-72-280P	280 Watts, JA Solar Solar Panel, Poly, Silver,72 Cells,	48	190.40	9139.20
SB6000US-US-TL-22	SB6000US-TL-22 SMA grid-tied inverter 6KW, 1.5KW Emergency Outlet	2	2766.00	5532.00
SMA SWPB	SMA SWPB Piggy Back Webconnect.	1	160.00	160.00
RS485Cable	RS485Cable 50Ft	1	75.00	75.00
LA302R	Lightning Arrestor AC	1	40.00	40.00
LA302DC	Lightning Arrestor DC	1	40.00	40.00
MNPV6	MNPV6 Midnight Solar	1	101.30	101.30
MNFUSE 15	15 Amps DC Fuse	4	8.00	32.00
MNTS	Fuses holder	4	8.00	32.00
Cable , 10AWG	PV OUTPUT-MC4 MALE & FEMALE	4	72.00	288.00
PV-Unirac-SM	PV Mounting Unirac Solar Mount Roof Mounting Hardware for 24 panels, Includes SM Rails, L-feets, Grounding Lugs, Integrated Bonding End and Mid Clamps	1	2800.00	2800.00
Total Cost of the materials without any incentives or rebates			\$18,239.50	\$ 1.36 per Watt
Sub Total Before Tax Credit			\$18,239.50	
Federal Tax Credit of 30%			-5471.85	
Total cost of the equipment after the tax credit			\$12,767.65	\$ 0.95 per Watt
Simple Payback Period for the materials only			5.14	Years
Note: All the products come with manufacturer warranty - 25 years for Solar Panels, 5 years for Inverter, 25 Years for Mounting etc. The roof mount system is a flush mounted to the roof. The sacings is calculated based on the electricity cost of \$.10/KWH-AC				
If you are from a place where the utility electric cost is different , than the payback period above will vary				

13.4KW JASolar W Mounting

	If your rate is (\$/KWH)	Payback would be, after 30% Tax Credit			
	\$.15/KWH		3.43 Years		

Copy of 11KW Suniva 280 Solar E

Panel Size	Qty	Total Wattage of the system			
280	40	11,200	Watts		
Total Cost of the equipment for the 6KW Micro-Inverter Grid-Tied PV system					
Item Code	DESCRIPTION	Quantity	Price Each	Amount	
OPT280SW-210	280 Watts, Suniva Solar Panel, Mono, Silver, B, 60 Cells, UL, Made in USA	40	173.60	6944.00	
P300-2NM4ARS	Solar Edge DC Optimizer	40	69.00	2760.00	
SE10000A-US-U	Solar Edge Inverter, 10KW, 240VAC, 60Hz	1	1986.00	1986.00	
PV-Unirac-SM	PV Mounting Unirac Solar Mount Roof Mounting Hardware for 24 panels, Includes SM Rails, L-feets, Grounding Lugs, Integrated Bonding End and Mid Clamps	1	1950.00	1950.00	
QMSC-A	Quickmount PV Classic Composition Mount with 6" hanger bolt	80	18.00	1440.00	
Total Cost of the materials without any incentives or rebates				\$15,080.00	\$ 1.35 per Watt
Sub Total Before Tax Credit				\$15,080.00	
Federal Tax Credit of 30%				-4524	
Other Local Incentives					
Total cost of the equipment after the tax credit				\$10,556.00	\$ 0.94 per Watt
Simple Payback Period for the materials only				6.08	Years
<p>Note: All the products come with manufacturer warranty - 25 years for Solar Panels, 5 years for Inverter, 25 Years for Mounting etc. This system qualifies for IBC 2012 (Fire Class A compliance) - strongly recommended for residential roof-top solar in fire prone areas such as Sand Diego, Yosomite etc. The roof mount system is a flush mounted to the roof. The sacings is calculated based on the electricity cost of \$.10/KWH-AC</p>					
<p>If you are from a place where the utility electric cost is different , than the payback period above will vary</p>					
	If your rate is (\$/KWH)	Payback would be, after 30% Tax Credit			
	\$.15/KWH	4.05	Years		
	\$.20/KWH	3.04	Years		
<p>Additional incentives are available and maybe significant in CA, TX,FL, NY, MA, NH, GA, CO, WA,OR. Please go to http://www.dsireusa.org/ for more information regarding additional incentives.</p>					
<p>If you need to customize this system a little bit or have questions regarding this please contact our engineers directly here</p>					