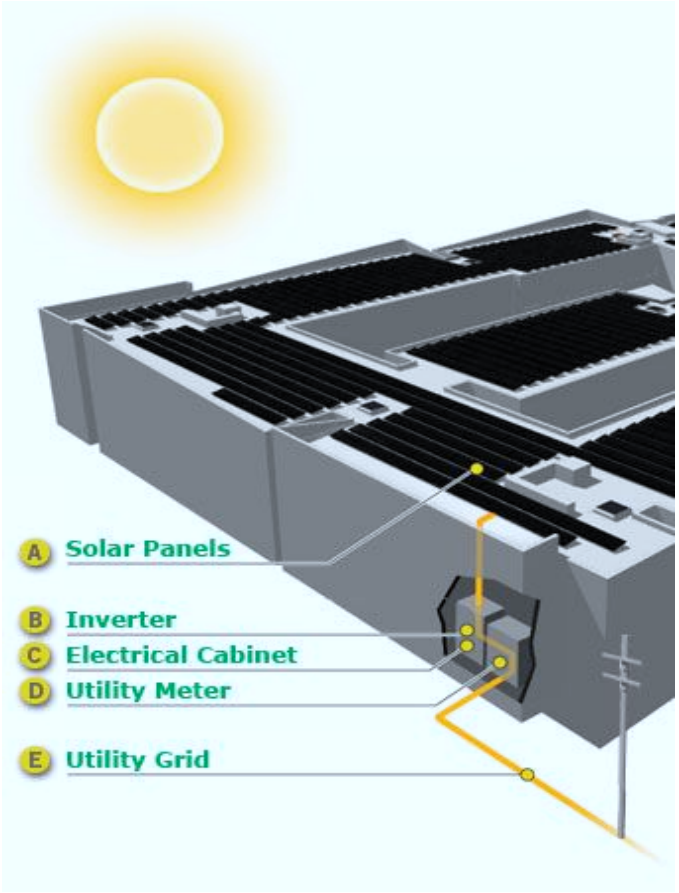
How Commercial Solar Systems Work



A Solar Panels Solar panels are installed on your roof or adjacent structure. These panels are made up of photovoltaic (PV) cells, which convert sunlight into DC power.

B Inverter The DC power from the solar panels is sent to an inverter, where it is converted into AC power, or standard electrical current used to power your facility.

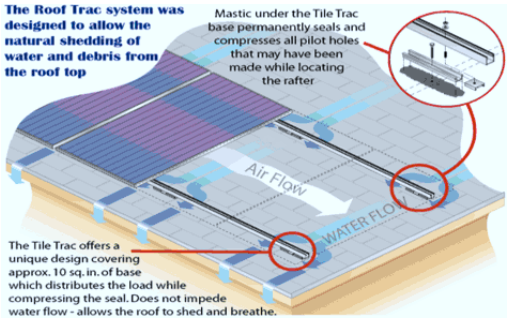
C Electrical Panel AC power travels from the inverter to the electrical cabinet, often called a breaker box. This power is then available to service all of your electrical needs.

D Utility Meter The utility meter continually measures your electrical supply; when your solar system produces more power than you need, the meter literally spins backwards, accumulating credits with the utility company that will offset your next bill.

- **E Utility Grid** Your business remains connected to the utility grid to supply you with electricity when you need more power than your system has produced, such as at night.

Sunlink Energy Solar Flushmount Systems						
System Size	10kW	15kW	20 kW	50kW	75kW	100kW
System Area sq. ft.	769	1153	1538	3846	5769	7692

- Maximum use of sloped roof space for commercial and GSA public buildings
- Lightweight structure engineered to with stand 120 mph+ winds and 50 lb snow loading
- Available for standing seam metal roofs with no roof penetrations

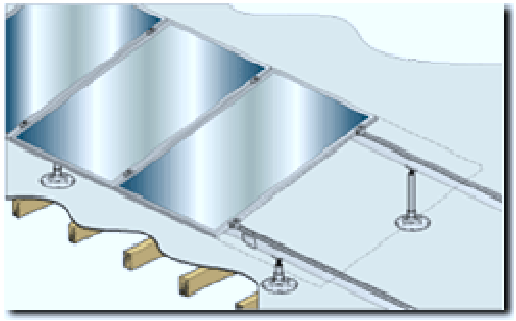


Roof Top Flush Mounting System

Flush Mounted Solar Power Panels

Sunlink Energy Solarwedge Systems						
System Size	10kW	15kW	20kW	50kW	75kW	100kW
System Area sq. ft.	1162	1744	2325	5814	8721	11628

- **Designed for flat roof industrial and government buildings**
- **Tilted arrays for optimum system performance available in 5, 10 and 15 degree tilt**
- **Easy access to roof reduces maintenance. Assumed tilt is 10 degrees at 40 degree Latitude**



Solar Power Wedge Mounting System

Wedge Mounted Sollar Power Array

Sunlink Energy Solar Ballasted Systems						
System Size	10kW	15kW	20kW	50kW	75kW	100kW
System Area sq. ft.	1162	1744	2325	5,814	8721	11628

- Flat roof mounting system for commercial and Federal Government buildings
- Requires no roof penetrations, available without ballast also
- Designed for maximum strength and stability. Assumed tilt is 10 degrees at 40 degree Latitude

Commercial Solar Ballast System

Rooftop Solar Power Panels

Sunlink Energy Solar Ground Mount Systems						
System Size	10kW	15kW	20kW	50kW	75kW	100kW
System Area sq. ft.	1162	1744	2325	5814	8721	11628

- Optimal use of unused open land space
- Simple, low cost installation
- Visible, attractive design. Assumed tilt is 25 degrees at 40 degree Latitude

Ground Mounted Solar Power System

Ground Mounting System for Solar Panels

COMMERCIAL GRID FEED SOLAR SOLUTIONS

System power	Solar Panel	Inverter	Solar Cable	Mounting system
10KW	40*250W mono/ poly	1*13KW grid inverter	4mm²	Solarwedge/ Flush mount/ Ballasted/ Ground mount
15KW	60*250W mono/ poly	1*17KW grid inverter	4mm²	Solarwedge/ Flush mount/ Ballasted/ Ground mount
20kW	80*250W mono/ poly	1*21KW grid inverter	4mm²	Solarwedge/ Flush mount/ Ballasted/ Ground mount
50KW	200*250W mono/ poly	5*13KW grid inverter	4mm²	Solarwedge/ Flush mount/ Ballasted/ Ground mount
75KW	300*250W mono/ poly	5*17KW grid inverter	4mm²	Solarwedge/ Flush mount/ Ballasted/ Ground mount
100KW	400*250W mono/ poly	5*21KW grid inverter	4mm²	Solarwedge/ Flush mount/ Ballasted/ Ground mount

	13K	17K	20K
Max PV-Generator Power	13500W	17600W	21200W
Max. Dc Voltage (Vdc)	1000	1000	1000
Max DC Current (A/B)	22/11	22/22	22/22
Grid Voltage (Vac)	184-264.5	184-264.5	184-264.5
Max.Efficiency (%)	98%	98.1%	98.2%
MPPT efficiency	99.9%	99.9%	99.9%

- Max efficiency 98.2%, Europe Efficiency 97.8%
- Double MPPT Tracking, MPPT tracking accuracy up to 99.9%
- IP65 design, work protection, DC switch integrated
- Flexible input and output connections, support RS485, Ethernet and USB communication
- Transformless design and high power density, it is lighter and more convenient for installation

Typical Electrical Characteristics			
Nominal peak power (Wp)		250W MONO MODULE	250W POLY MODULE
Power tolerance		0 to+3%	
Nominal voltage (Vmp)		30.0V	30.2V
Nominal current (Imp)		8.34A	8.27A
Open circuit voltage (Voc)		37.5V	37.4V
Short circuit current (Isc)		8.89A	8.70A
Dimension (mm)		1652*993*40	
Number and arrangement of cells		60/pcs of mono/ poly crystalline silicon (6x10)	
Test condition		AM=1.5, 1000W/m², 25℃	
Thermal Characteristics		Operating Conditions	
Nominal operating temperature	45+/-2℃	Max system voltage	DC1000V
Temperature coefficient of pmax	-0.44%℃	Max series fuse rating	15A
Temperature coefficient of Voc	-0.37%℃	limiting reverse current	Do not apply external voltage large than Voc of the module
Temperature coefficient of Isc	+0.035%℃	Operating temperature range	-40℃ to 85℃
		Max static load , front(snow&wind)	5400Pa
		Max static load, back (Wind)	2400Pa
Module Warranty	10 years 100% workmanship and material		
	15 years more than 90% output		
	25 years more than 80% output		
Module Certificate: IEC61215/IEC61730/ TUV/ MCS/ VDE/ ISO9001/ VDE/ UL/ ETL