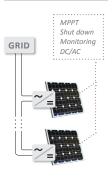


A COMPARISON OF MICROINVERTERS & POWER OPTIMIZERS

Module level electronics overcome the shortcomings of traditional inverters and enable maximum power, module level monitoring, flexible design and enhanced safety.

However, there is no need to add an inverter to every module if DC power optimizers can achieve all these benefits at lower cost, higher efficiency and higher reliability.

Microinverters



Power Optimizers



Benefits	Microinverter Solutions	SolarEdge Solution	Details
Cost per W Scalability	Higher Not Scalable	Lower Scalable	 SolarEdge system cost is 20%-50% lower, including inverter and power optimizers, (both with 25 year warranty) built-in ethernet gateway, and 25 years of module level monitoring The cost/watt of a SolarEdge system decreases as the installation size increases
Added Energy	Lower	Higher	 SolarEdge inverters are 97.5% CEC. The best Microinverter is 96% SolarEdge Power Optimizers have a wider MPPT range and track voltage from 5V. Microinverters have a higher minimum voltage requirement equaling a lower shade tolerance SolarEdge Power Optimizers support up to 400W modules with no energy loss due to clipping in any solar conditions
Reliability	Lower	Higher	 SolarEdge Power Optimizers have about 1/3 of the parts count of a typical Microinverter. Fewer parts equals lower failure rates and extended product life time SolarEdge Power Optimizers use ceramic capacitors. Some microinverters use electrolytic capacitors. The lifetime of an electrolytic capacitor will be greatly reduced if it is exposed to high temperatures Microinverters generate more heat due to their lower efficiencies leading to accelerated module degradation and reduced reliability
Compatibility	Limited	Broad	 Power Optimizers are compatible with any c-Si modules, up to 400W / 96 cells. Microinverters are limited by their DC input range to 60 cell Modules
Communication and Monitoring	Vulnerable	Robust	 SolarEdge inverters use Power Line Communications in a controlled DC enviornment. MicroInverters use AC Power Line Communications which is highly susceptible to interference caused by AC devices SolarEdge inverters have an ethernet gateway built in. Microinverters require an external communication gateway
Installation Flexibility and Cabling	Limited	Flexible	 SolarEdge fixed string voltage allows for fewer strings with up to 25 optimizers per string. Microinverters are limited to 17 modules per branch circuit SolarEdge Power Optimizers and Inverters are wired with standard PV wire. Microinverters require an expensive trunk cable and dedicated AC load center prior to the AC disconnect

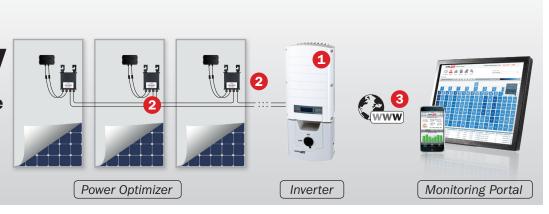
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Ordering Guidelines

How to order SolarEdge

- 1 Inverter
- 2 Optimizer & Connectors
- 3 Communication



1 Inverter (UL1741 certified):

Select inverter quantity and model. For example: 1 x "SE5000A-US".

Max. recommended DC Power (@STC)	3750 W	4750 W	6250 W	7500 W
SolarEdge inverter P/N	SE3000A-US	SE3800A-US	SE5000A-US	SE6000A-US
Soligent inverter P/N	310-0367	310-0368	310-0369	310-0370

* Grid compatibility: SE3000A-US/SE3800A-US: 208V/240V. SE5000A-US/SE6000A-US: 208V/240V/277V.

2 Power Optimizer & Connectors:

Select power optimizer P/N from table below.

Quantity: One power optimizer per module.

Optimizer type: Select optimizer type matching the module peak power (STC) and Voc.

Connector: Select power optimizer input connectors matching the module cable connectors.

Module peak power / Voc				
Module connectors	250W / 55 Voc	300W / 75 Voc	400W / 75 Voc	
Multi contact MC4	565-0159	565-0169	565-0173	
Amphenol H4	565-0161	565-0172	565-0176	
Huber Suhner	565-0177	565-0171	565-0175	
Тусо	565-0160	565-0170	565-0174	

3 Inverter Connectivity: Each inverter is provided with an Ethernet port for FREE network connectivity

Optional Wireless Inverter option	Home ZigBee gateway	Slave inverter ZigBee
Inverter -> Home wireless (instead of RJ45)	0110001	ZBDG2X-NA N (570-0910)

Included with every SolarEdge system:

· Ethernet/RS485 ports in each inverter for FREE network connectivity.

·25 years FREE inverter and module-level real time monitoring.

·25 year power optimizer warranty. 12 year inverter warranty.

Inverter warranty extension from 12 to 20/25 years available at: (http://www.solaredge.us/groups/us/service/warranty)

Extension from 12 to 20 years	20 years	25 years	
Single Phase Inverter <4kW	\$228	\$370	
Single Phase Inverter 4kW - 6kW	\$228	\$469	

Contact SolarEdge today: infoNA@solaredge.com | +1 (530) 273 3096 | Support (Toll free) +1 (877) 360 5292

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