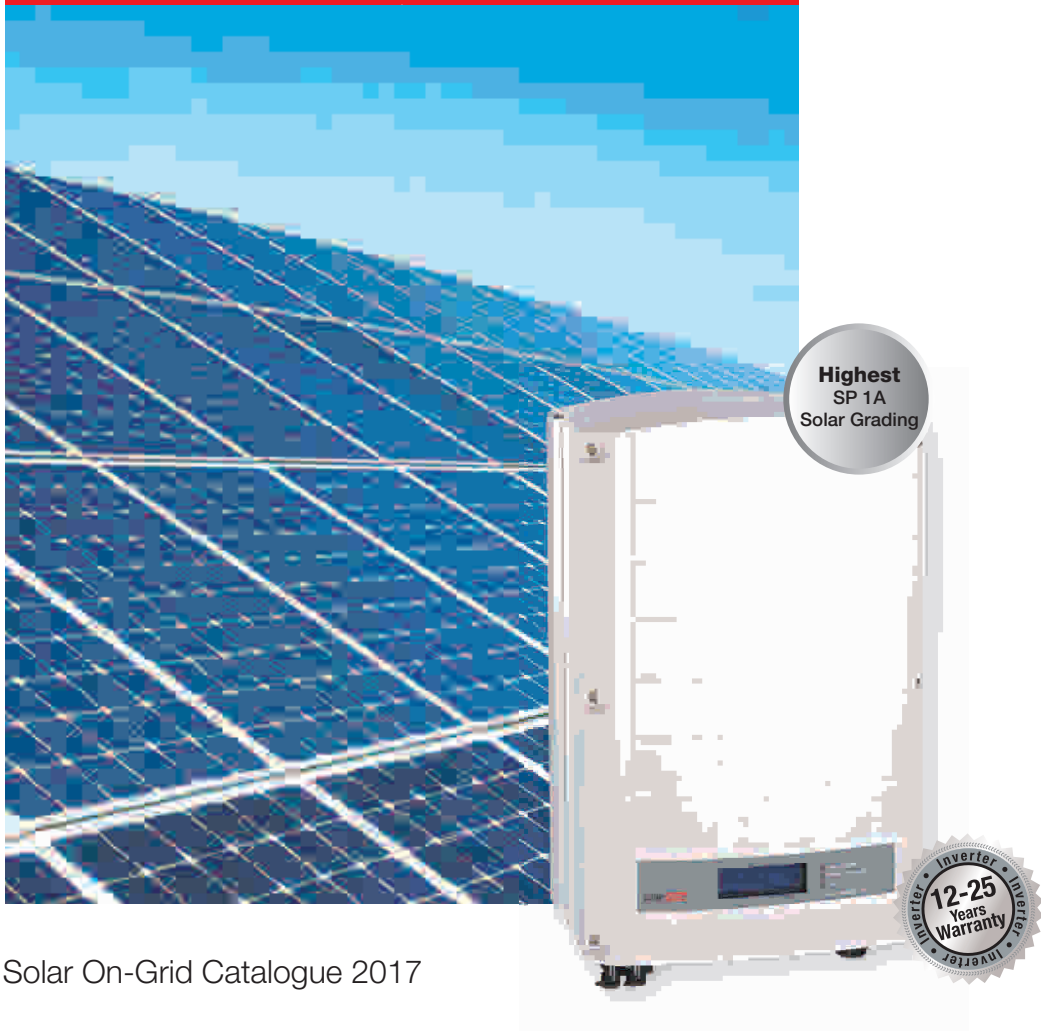


More Power
More Revenue
More Insight



Solar On-Grid Catalogue 2017

solar**edge**



HAVELLS



About Havells

Havells India Limited is a leading Fast Moving Electrical Goods (FMEG) Company with a strong global presence. Havells enjoys enviable market dominance across a wide spectrum of products, including Industrial & Domestic Circuit Protection Devices, Cables & Wires, Motors, Fans, Modular Switches, Home Appliances, Electric Water Heaters, Power Capacitors, CFL Lamps, Luminaires for Domestic, Commercial and industrial Applications.

Today, Havells owns some of the most prestigious brands like Havells, Crabtree, Standard and Promptec. Its network constitutes of 4000 professionals, over 6000 dealers and 40 branches in the country and presence in over 50 countries globally. Its twelve state-of-the-art manufacturing plants in India located at Haridwar, Baddi, Sahibabad, Faridabad, Alwar, Neemrana and Guwahati are manufacturing globally acclaimed products, synonymous with excellence and precision in the electrical industry.

The company pioneered the concept of exclusive brand showroom in the electrical industry with 'Havells Galaxy'. Today over 400 Havells Galaxies across the country are helping customers, both domestic and commercial, to choose from a wide variety of products for different applications. Havells became the first FMEG Company to offer door step service via its initiative 'Havells Connect'. Thanks to the quality of products and quicker service, it has minimum customer complaints and highest customer satisfaction.

Havells alongwith its brands, have earned the distinction of being the preferred choice of electrical products for discerning individuals and industrial consumers both in India and abroad. Havells offers same quality products for both Indian and international markets. It is committed to keep powering the world with its state-of-the-art innovations and energy-efficient solutions. Currently over 90% of its product offering is energy efficient and manufactured in-house.

Social and environmental responsibility has been at the forefront of Havells operating philosophy and as a result the company consistently contributes to socially responsible activities. For instance, the company is providing mid-day meal in government schools in Alwar district, covering more than 58000 students per day. The company has also built over 2000 eco-friendly bio toilets in government schools thus contributing to nation's Swaach Bharat Mission. The group company, QRG Healthcare runs a 140 bed hospital in Faridabad. In the past, the company has generously contributed to the society during various national calamities like the Bihar Flood, Tsunami and Kargil National Relief Fund etc.

The essence of Havells' success lies in the expertise of its fine team of professionals, strong relationships with associates and the ability to adapt quickly and efficiently, coupled with the vision to always think ahead.

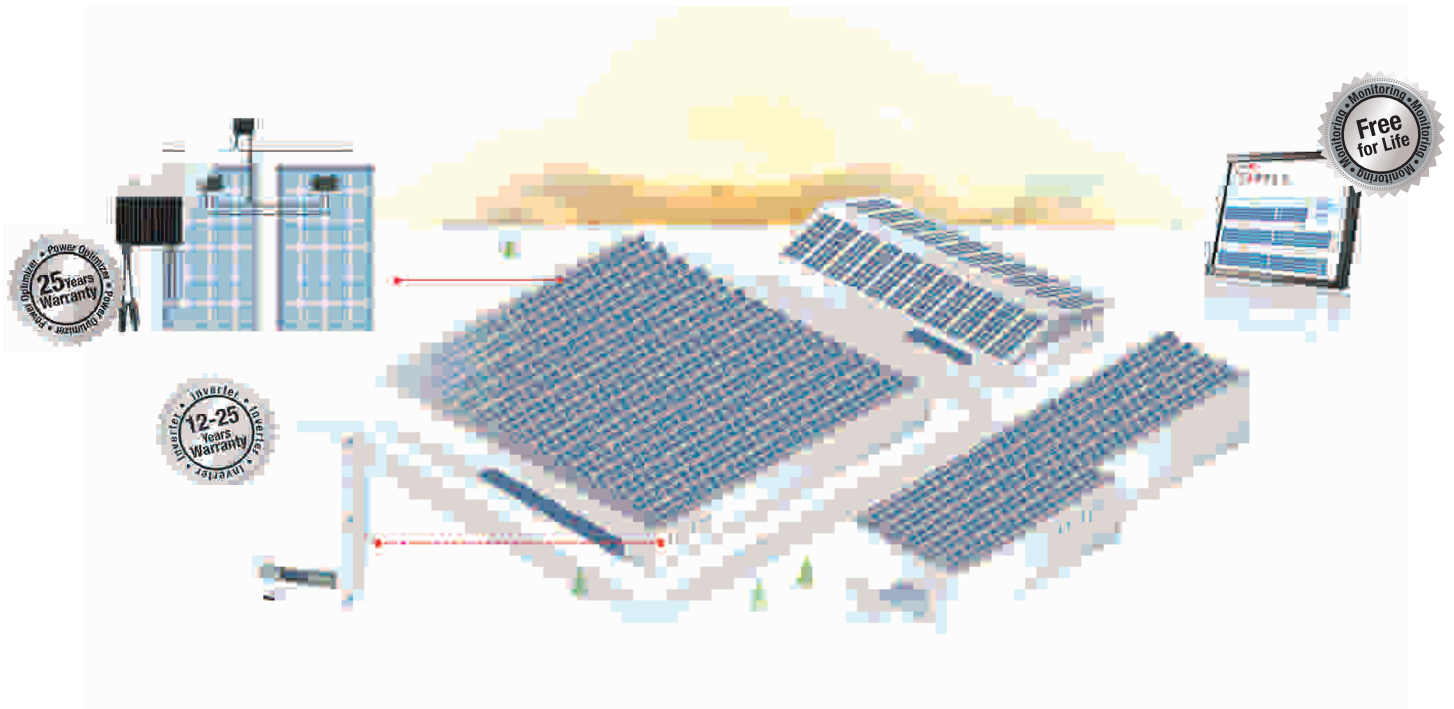
Optimising Commercial & Industrial PV Systems



Optimising at the Module Level
Get more power, more revenue
and more insight into your system
performance

Connecting SolarEdge power
Optimizers to PV modules
make them
SMART MODULES
that produce
MORE POWER





POWER OPTIMIZER

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- Harvest of up to 25% more energy from each module
- Constant feedback on the performance of each module
- Designed to shutdown each module for maximum safety in case of an emergency

INVERTER

A simpler and more reliable inverter:

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- Suitable for indoor and outdoor installations

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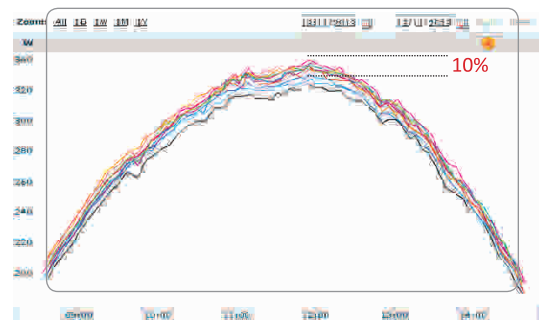
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Screenshot from the SolarEdge monitoring portal, showing power curves of 10 adjacent modules in a string with 10% mismatch between highest and lowest performing modules



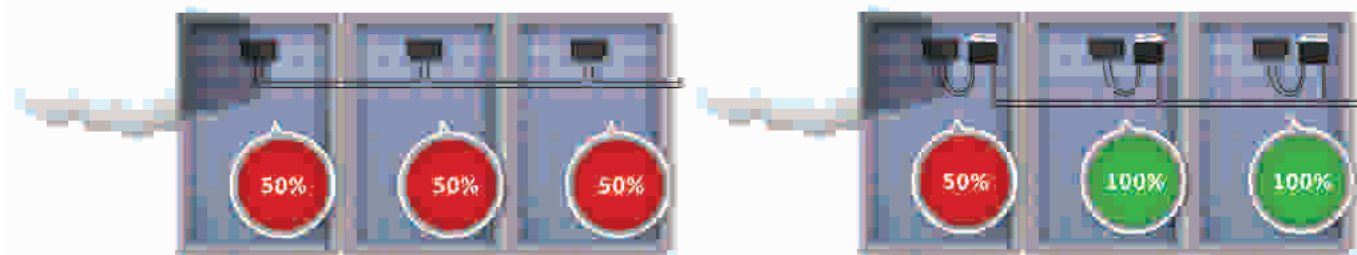
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With traditional inverters, the weakest module reduces the performance of all modules.
With SolarEdge, each module produces the maximum energy, and power losses are eliminated.

Traditional System

Havells SolarEdge System



MORE MODULES ON YOUR ROOF; AND MORE SAVINGS ON YOUR BILL

Traditional System



Havells SolarEdge System



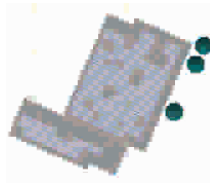
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Installers can place more modules on the rooftop with SolarEdge and give you the design that you want:

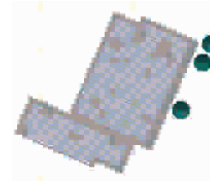
- ✓ Shaded areas
- ✓ Multiple roof angles
- ✓ More options to fit the roof size
- ✓ Free from electrical constraints

MORE ENERGY BY DESIGN

Increase your system capacity with more modules on the roof



Traditional inverter | 149.5kW DC

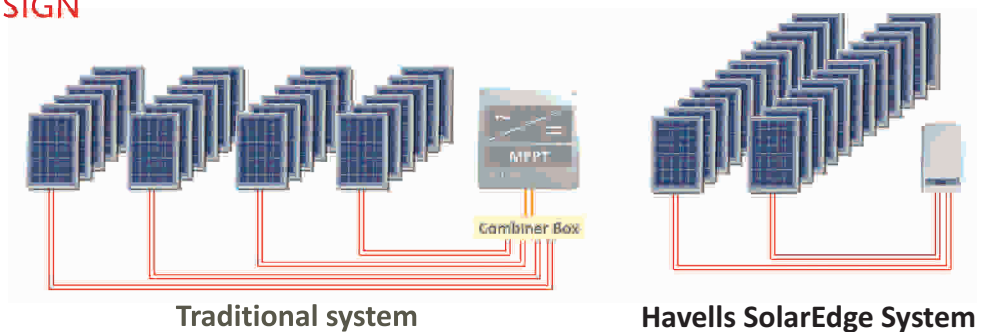


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34% more power

Flexible site design > More modules on the roof > More power

COST SAVING BY DESIGN

Save 50% on electrical BoS with longer strings
26-60 modules, up to 11.25kW per string



>Secure Your Investment

PROTECTING YOUR ASSETS

- > Providing the highest safety for installers, electricians, and firefighters
- > Better suited for future insurance requirements
- > Unique “DC Safe” feature which ensures rapid shutdown when AC Grid is turned off.



COST SAVING MAINTENANCE

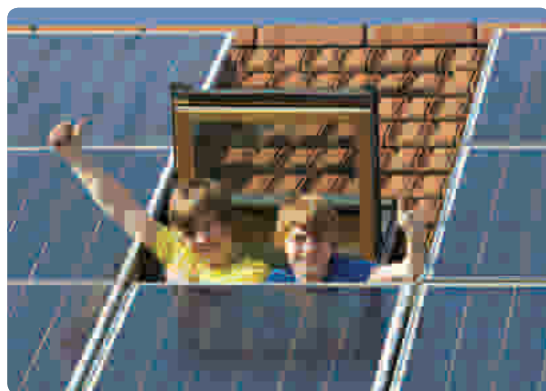
- > Free module-level monitoring for system lifetime
- > Full control of your assets
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 - Less trips to site & less time spent on site
 - Higher system uptime
- > Complete system status on your mobile (iOS or Android)



> Havells SolarEdge For Your Peace of Mind

PEACE OF MIND

With SolarEdge, whenever AC power is off, DC wires are designed to automatically de-energize providing automatic protection to installers, maintenance personnel, firefighters and property. Installers, maintenance personnel and firefighters are automatically protected from high voltage.



CONNECT ON THE GO

Full visibility of system performance
Monitor your system, from anywhere using free iPhone and Android applications



SYSTEM LIFETIME WARRANTY

Backed by best in class warranties:
25 years standard for optimizers;
12 years standard extendable to
25 years for inverters
Monitoring: free for 25 years



> Advantage Plus

S.no	Features	Havells SolarEdge String System	Traditional String System
> Future Compatibility & Warranty			
1	Grid-Tie String Inverter Warranty	12 Years	5 Years
2	Power Optimizer Warranty	25 Years	Not Applicable
3	Free Lifetime Monitoring	√	x
> Monitoring & Access			
4	Module Level Monitoring	√	x
5	Free Mobile Application	√	x
6	Full Visibility of system performance(Module & On Grid Inverter)	√	x
> Safety & Protection			
7	Arc-fault circuit protection (protection against fire)	√	x
8	Rapid shutdown of DC system when grid is turned off (important protection against fire)	√	x
9	Remote Trouble shooting	√	x
> Constraint free design			
10	Module in partial shaded areas	√	x
11	Different power rating in one string	√	x
12	Parallel string of uneven lengths	√	x
13	Multiple orientation in one string]	√	x
14	Longer String	√	x
> Reduced Power loss (due to)			
15	Module wattage tolerances	√	x
16	Thermal Mismatch	√	x
17	Partial shading / soiling	√	x
18	Future compatibility for Modules	√	x
19	Protection against solar panel obsolescence in Future	√	x
20	New technology solar panels can be incorporated in Future	√	x

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E-mail: marketing@havells.com, www.havells.com

Consumer Care No.: 1800 11 0303, 1800 103 1313 (All Connections), 011-4166 0303 (Landline)

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In Collaboration with **solar**edge



HAVELLS

More Power
More Revenue
More Insight



Highest
SP 1A
Solar Grading



Inverter • Inverter • Inverter
12-25
Years
Warranty
Inverter • Inverter • Inverter

Solar On-Grid Catalogue 2017

solar**edge**



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Havells owns some of the prestigious global brands like Crabtree, Sylvania, Concord, Luminance & Standard.

With 91 branches / representative offices and over 6500 professionals in over 50 countries across the globe, the group has achieved rapid success in the past few years. Its 11 state-of-the-art manufacturing units in India located at Haridwar, Baddi, Noida, Faridabad, Alwar, Neemrana, and 6 state-of-the-art manufacturing plants located across Europe, Latin America & Africa churn out globally acclaimed products. Havells is a name synonymous with excellence and expertise in the electrical industry. Its 20000 strong global distribution network is prompt to service customers.

The company has acquired a number of International certifications, like CSA, KEMA, CB, CE, ASTA, CPA, SEMKO, SIRIUM (Malaysia), SPRING (Singapore), TSE (Turkey), SNI (Indonesia) and EDD (Bahrain) for various products. Today, Havells and its brands have emerged as the preferred choice of electrical products for discerning individuals and industrial consumers both in India and abroad.

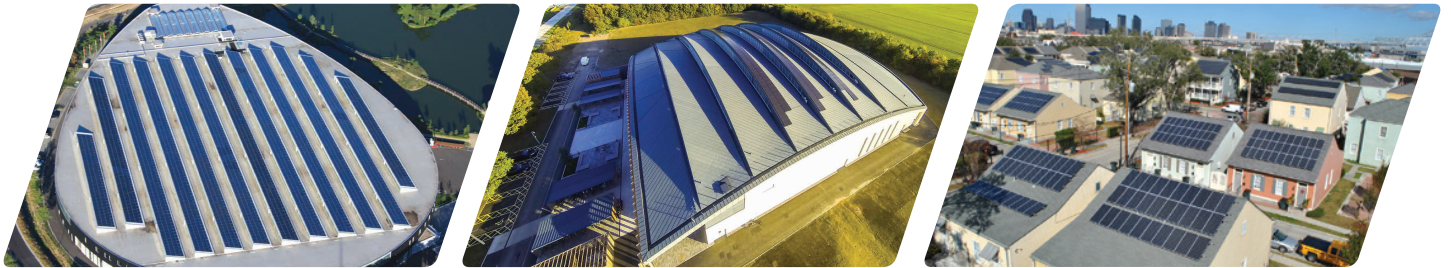
In an attempt to transform itself from an industrial product company to a consumer products company, Havells launched the consumer electrical products such as LED luminaires, CFLs, Fans, Modular Switches Luminaires, Water Heaters and Domestic Appliances. The company has been consistent in its brand promotion with sponsorship of Cricket events like T20 World Cup, India-Australia Series and IPL Season first, second, third and fourth.

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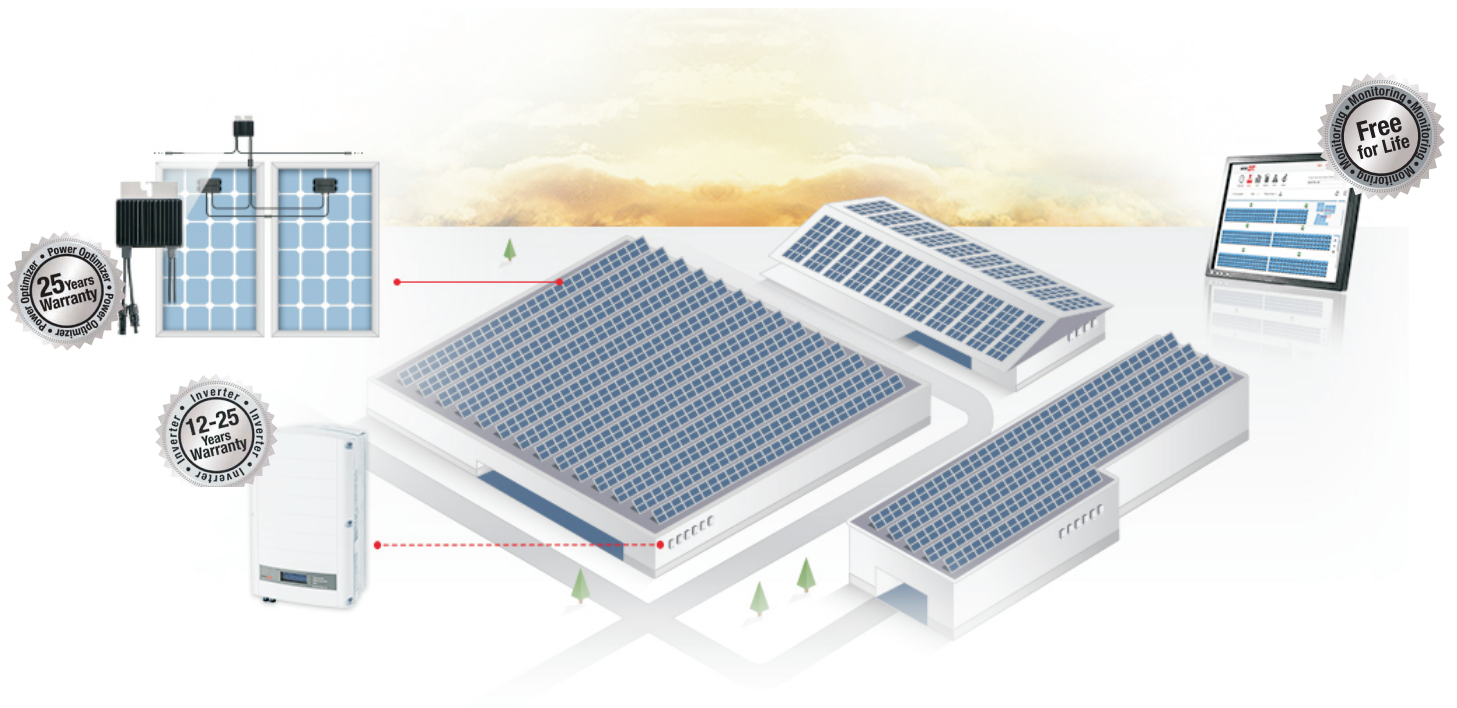
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Get more power, more revenue
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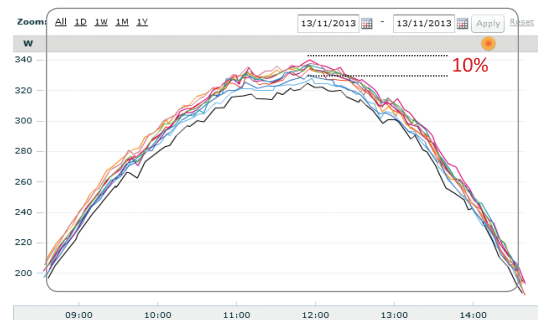
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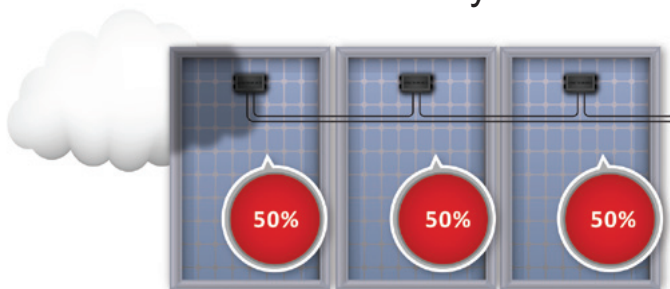


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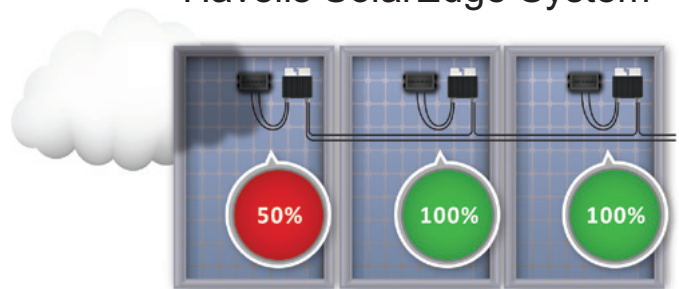


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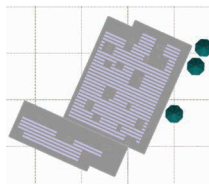
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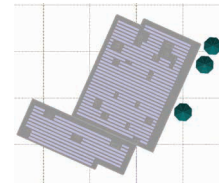
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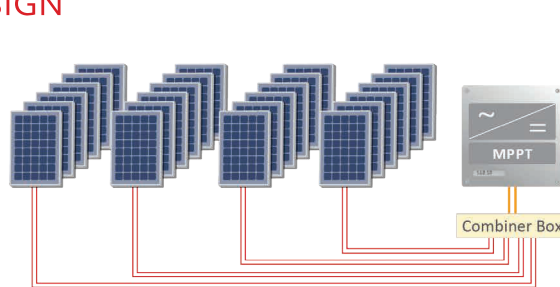


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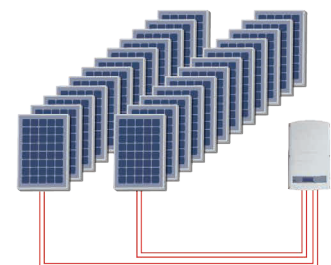
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Monitor your system, from anywhere using free iPhone and Android applications



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12 years standard extendable to 25 years for inverters
Monitoring: free for 25 years



> Advantage Plus

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