

## ENERGY FROM SUNLIGHT

# Solar energy for grid supply



Solar energy – power generation from sunlight is one of the most environmentally-friendly forms of energy production.

Manufacturing technology in accordance with the most recent standards  $% \left( {{{\rm{S}}_{{\rm{s}}}}} \right)$ 

Today, solar energy for grid supply is much more than just a good alternative

Quality products and our many years of experience since 1982 guarantee durability and assure a reliable supply

### HOW SOLAR ENERGY WORKS

Solar modules convert sunlight directly into direct current. The direct current produced by the solar modules is immediately converted by the inverter into 230 V or 400 V three-phase current and can provide energy to electrical consumers such as those of a typical household. In doing so, the inverter operates in what is known as grid-parallel operation mode, meaning that the voltage and frequency of the produced energy correspond with that of the public power grid. In this manner, energy generated through sunlight is fed in to the public power grid.

### WHAT YOU NEED

The solar modules represent the heart of any solar power system. IBC solar modules are leading the global market in terms of efficiency/energy yield, reliability and quality.

Modern inverters for grid supply facilitate a quick and flexible installation of solar power systems. Their high degree of efficiency and reliability guarantee maximum energy yields, thus providing the basis for a cost-efficient operation of our grid feed systems. All inverters offer wide-ranging options for measurement recording and system monitoring. The CE mark guarantees the maximum level of safety and is a matter of course for this technology. The IBC TopFix 100 flat and pitched roof mounting systems provide your solar modules with just the right footing. IBC TopFix 100 flat roof mounting systems are available for every installation angle and are appropriate for all framed solar module models. They guarantee a quick and secure fastening. IBC TopFix 100 pitched roof mounting systems are also suitable for all solar modules. They are statically tested for snow and storm safety. IBC solar modules can also be integrated into the roof. The aluminum carrier rails ensure a quick and secure fastening. What's more, because we employ standard mounting materials, our low mounting costs are yet another point in our favor.

### YOUR ADVANTAGE

Just a few short years ago, solar power system operators often used the cost-free energy from their own roof in their house in order to use less mains power and thus reduce their electricity bills. Nevertheless, thanks to the feed-in tariff\* which is guaranteed through the German Renewable Energy Sources Act (EEG in German), it is now more economically sensible to feed self-produced energy into the public power grid. In doing so, the feed-in tariff makes it possible to significantly reduce the amortization time of your solar power system.

#### Overview of tariffs pursuant to the EEG

(Tariffs valid from January 1 to December 31, 2008)	
Open spaces	35.49 Ct/kWh
Roofs up to 30 kW	46.75 Ct/kWh
Roof, system component over 30 kW	44.48 Ct/kWh
Roof, system component over 100 kW	43.99 Ct/kWh
Facades up to 30 kW	51.75 Ct/kWh
Facades, system component over 30 kW	49.48 Ct/kWh
Facades, system component over 100 kW	48.99 Ct/kWh