

## ENERGIZING YOUR EVERYDAY

SOLAR SOLUTIONS PORTFOLIO



# ENERGIZING YOUR EVERYDAY SINCE 1887

#### WHAT IS THE FIRST THING YOU DO IN THE MORNING?

Open your eyes. Switch on the light. Stand up, and make yourself a good cup of coffee. Cook a healthy breakfast. Shower, put on clean clothes, and start full of energy into the new day that awaits. Were you aware that AEG has accompanied your every step?

By bringing the first electric bulbs (1887), the first electric cooker (1910), or the first washing machine (1958) into the homes of thousands of families, AEG has been energizing the everyday for over 130 years with cutting-edge innovations and solutions to make life easier. Today, AEG is at your side with renewable energy solutions that make your home and workplace the control center of an intelligent and effortless energy revolution. Empowering you with sustainable energy solutions to reach your daily goals, whilst caring for the planet.

#### **AEG PHOTOVOLTAIC SOLUTIONS**

AEG photovoltaic products stand out from the crowd for their quality and reliability. Aesthetically pleasing and with innovation as standard, AEG's interconnected, smart solar devices allow you to be always an idea ahead in understanding solar energy and making it work for you, granting you full control over your PV system, its outputs and giving you peace of mind.

#### **SOLAR SOLUTIONS**

The Solar Solutions Group proudly brings AEG quality solar products to international markets. Solar Solutions Group is present in over 30 countries worldwide with a network of selected partners, each delivering a premium product and customer experience.

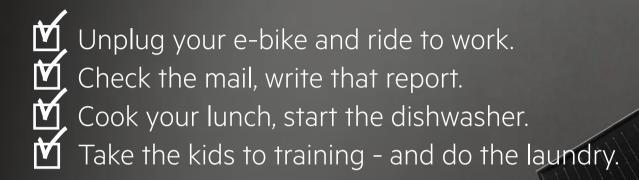


A new day awaits, and the first rays of sunshine illuminate your solar plant. AEG inverters are ready to capture the power, transforming it into clean energy for your home appliances - from the toaster to the coffee machine, so you can start your day full of energy too.

For AEG solar inverters see page 16



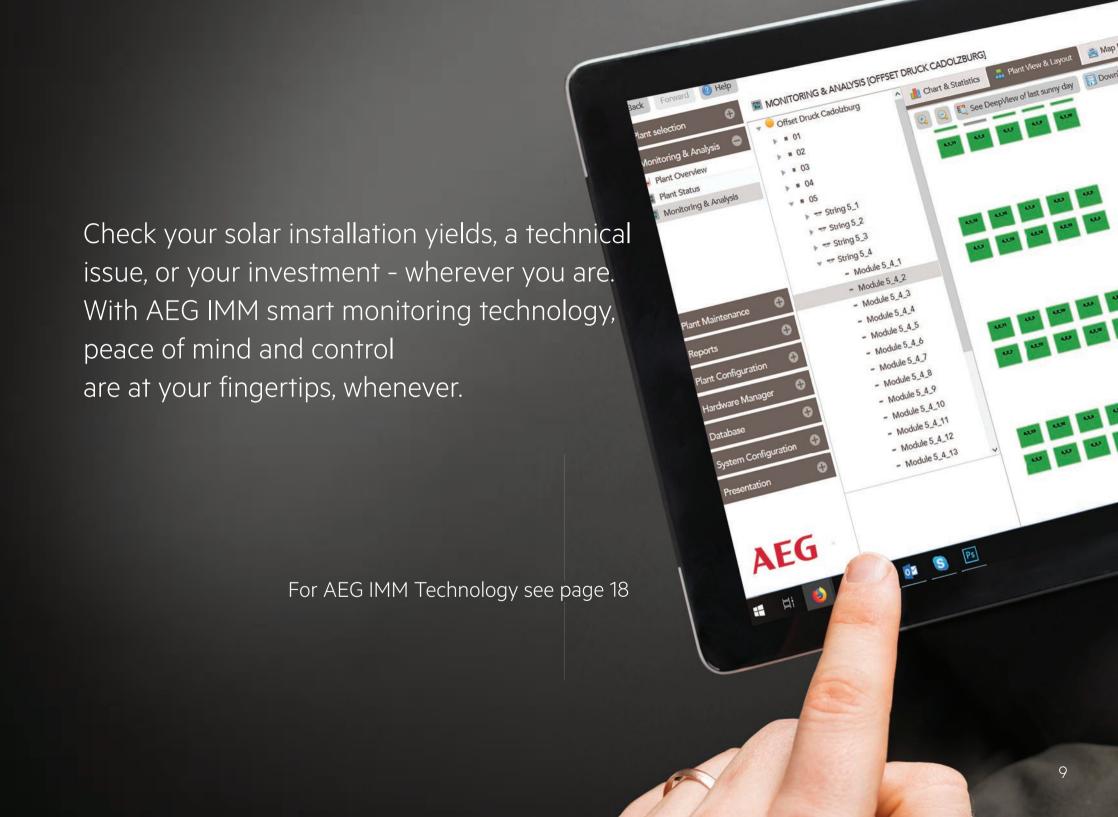




You can rely on the clean energy from your AEG high efficiency solar modules to check off another task from your to-do list.

For AEG solar modules see page 14







The day was demanding. Get a good night's rest, while the AEG storage unit watches over your home and its needs. With the electricity you have harvested during the day, you can rest assured that your home runs on clean energy even at night.

For AEG energy storage see page 20







### QUALITY YOU CAN RELY ON

#### THE AEG PRODUCT PORTFOLIO

The AEG product portfolio encompasses a wide range of photovoltaic products satisfying the need for flexibility and reliability in today's solar plant whatever the size of installation. AEG solar products - solar PV modules, inverters, storage and monitoring solutions- are manufactured from carefully selected and tested components to ensure the highest quality, reliable efficiency and a long product life.

Solar Solutions carefully selects suppliers according to rigorous audit processes carried out by both independent Quality Assurance bodies and Electrolux, to offer customers worldwide the reassurance of certified quality and due diligence they can rely on. AEG solar products are compliant with the latest standards to guarantee safety and reliability and are certified among others by TÜV Rheinland, TÜV Süd, and KIWA. The production facilities are certified according to ISO 9001, ISO 14001 and OHSAS 18001.

#### **AEG PHOTOVOLTAIC SOLUTIONS**

Each and every AEG solar product is designed with the user in mind to grant you a seamless product experience. AEG products make solar an essential part of your journey towards a greener and more sustainable future. For this reason, AEG solar products and Solar Solutions' commitment have been acknowledged by Electrolux with their Innovation and Sustainability Awards in 2016 and 2018.



Electrolux Innovation Award 2016 Sustainability Award 2016 Driving Sustainability Award 2018

### SOLAR MODULES

**PREMIUM** 

#### HIGH EFFICIENCY

**PROFESSIONAL** 

GLASS-GLASS: designed to endure harshest conditions.

120 mono cells, up to 330 Wp

Black frame / transparent EVA transparent glass / black glass

15 years product warranty
(optionally extendable to 30 years)
30 years performance warranty

ULTRA BLACK: premium aesthetics, seamless "total look".

60 mono cells, up to 310 Wp

Black frame / black backsheet
Black bushars (ultra black)

15 years product warranty (optionally extendable to 20 years) 25 years performance warranty HALF-CUT CELL TECHNOLOGY Efficiency booster for the plant

120 (M6) mono cells, up to 380 Wp 120 (G1) mono cells, up to 350 Wp 144 (M6) mono cells, up to 455 Wp

Silver frame / white backsheet (standard) Silver frame / black backsheet (zebra)

15 years product warranty (optionally extendable to 20 years) 25 years performance warranty FULL BLACK, HALF-CUT CELL Efficiency and sleek beauty

120 (M6) mono cells, up to 360 Wp 120 (G1) mono cells, up to 330 Wp

Black frame / black backsheet (full black)

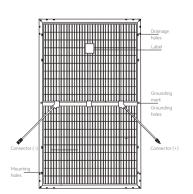
15 years product warranty
(optionally extendable to 20 years)
25 years performance warranty

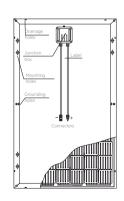
POLYCRYSTALLINE solid design for reliable yields

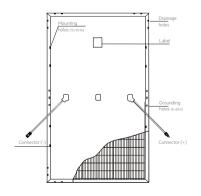
72 poly cells, up to 280 Wp 60 poly cells, up to 335 Wp

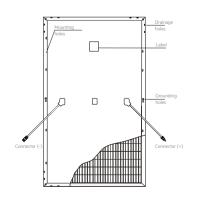
Silver frame / white backsheet (standard)

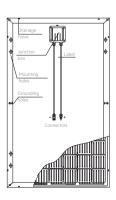
12 years product warranty25 years performance warranty











### RÉLIABLE YIELDS, PREMIUM AESTHETICS

#### **POWERFUL BUT CHIC**

AEG solar modules are built to deliver clean energy over the whole lifespan of your solar installation. The rigorous tests that each solar module undergoes allow us to cover our products with a performance warranty of 25 years.

The careful material selection grants AEG solar PV modules sleek and chic looks that add an aesthetic value to any solar installation.

The advanced monitoring technology at module level optionally embedded in AEG solar panels (AEG IMM) allows you to gain full control of the performance of your products and of your overall installation, from anywhere you wish.

#### **AEG SOLAR MODULES PORTFOLIO**

The AEG solar module portfolio encompasses a wide range of products to flexibly fit different planning needs. It includes:

- High efficiency mono-and polycrystalline solar modules
- Ultra-black solar modules
- Double-glass solar modules
- Half-cut cell technology solar modules



AEG solar modules are optionally equipped with AEG IMM monitoring technology

### SOLAR INVERTERS

SINGLE-PHASE ≤5 kWp

THREE-PHASE ≤10 kWp

THREE-PHASE ≤30 kWp

THREE-PHASE ≤70 kWp

Single-phase (monophase) inverters for small-size residential installations

Power classes

1 MPPT: 750 Wp up to 5 kWp

2 MPPT: 4 kWp to 5 kWp

Matte black housing. Compact size Global monitoring, RS485 + WiFi

5 years Product warranty (optionally extendable to 10/15/20 years)

Three-phase inverters for mediumsize residential installations

Power classes
2 MPPT: 4 kWp to 10 kWp

Matte black housing. Compact size Global monitoring, RS485 + WiFi

5 years Product warranty (optionally extendable to 10/15/20 years )

Three-phase inverters for mediumsize commercial installations

Power classes 2 MPPT: 12 kWp to 17 kWp 2 MPPT: 20 kWp to 30 kWp

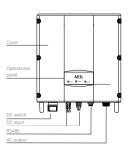
Matte gray housing. Robust construction Global monitoring, RS485 + WiFi

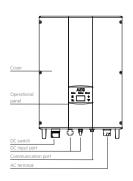
5 years Product warranty (optionally extendable to 10/15/20 years) Three-phase inverters for large-size commercial installations

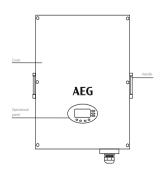
Power classes 2 MPPT: 33 kWp to 35 kWp 1 MPPT: 40 kWp to 70 kWp

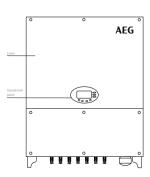
Matte gray housing. Robust construction Global monitoring, RS485 + WiFi

5 years Product warranty (optionally extendableto 10/15/20 years)









### ELEGANCE, POWER, CONTROL

#### DESIGNED TO PLEASE, MADE TO LAST

The AEG solar inverters belong to a new generation of grid-tied PV string inverters specifically developed for residential systems, safely converting the clean energy from your solar installation into energy for domestic use with your home appliances.

With eye-pleasing elegant style, the AEG residential solar inverters provide real time access to their operation and performance thanks to advanced mobile monitoring applications.

With their robust construction, the larger AEG three-phase inverter models are made to last. They are designed to ensure that any commercial installation deliver optimum yields over their lifetime, and safely feed the produced energy to the grid over many years.

#### **AEG SOLAR INVERTER PORTFOLIO**

The AEG solar PV string inverter portfolio flexibly covers the needs of modern residential installations and grid-tied commercial systems with:

- Compact single-phase and three-phase inverters for residential installations
- Robust three-phase inverters for medium and large commercial installations



Flexible DC-AC conversion for all planning needs, reliable performance over time

### IMM TECHNOLOGY

**IMM SOLAR MODULES** 

**IMM UPGRADE** 

**IMM HARDWARE** 

IMM WEB PORTAL

Solar modules with integrated AEG IMM monitoring technology

Integrated IMM is optionally available for all AEG mono- and polycrystalline solar modules. It monitors each module individually

AEG IMM Sensor-enabled smart junction box natively integrated in the solar module

12 year Product warranty25 years Performance warranty

AEG IMM smart monitoring upgrade for existing power plants

The AEG IMM Upgrade box can retrofit any non-IMM solar module to enable IMM smart monitoring

Connecting to the existing module junction box via MC4 connectors

5 years Product warranty

String Reader and Gateway for real-time plant data transmission

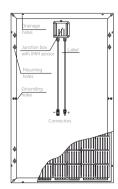
The String Reader performs high precision data reading from the strings. The Gateway reliably conveys module and string measurements to the IMM Web Portal

RS485 communication, DIN-rail mounting

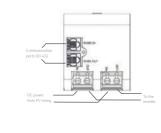
2 years Product warranty

Always knows what is going on in your solar plant, why, and what to do.

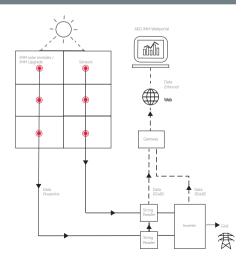
The IMM Web Portal analyses the data from the plant, detecting individual performance variations, and locating the exact source and reason of technical issues thanks to intelligent data analysis. It suggests troubleshooting solutions, and optimizes maintenance plans to maximise the investment and reduce the costs. Available as PC and mobile application











### YOUR SOLAR PLANT AT YOUR FINGERTIPS

#### BE ALWAYS IN THE KNOW, OPTIMIZE, SAVE

Is your solar plant working as it should?
What might be the problem behind that energy loss?
Can you save costly maintenance programmes and make your plant work more efficiently?

You can! Gain full insight into the performances of each individual module and take control of your solar installation with AEG IMM (Individual Module Monitoring).

AEG IMM is a unique solar plant monitoring technology giving real time module level data allowing smart plant management run by artificial intelligence. With the intuitive visualizations and virtual assistance of the AEG IMM Web Portal, you have your power plant at your fingertips - if you want to check a technical issue, organize plant maintenance, optimize your investment and save in the process. Enjoy the peace of mind given by smart monitoring; you are in control.

#### **AEG IMM SMART MONITORING TECHNOLOGY**

- CONTROL your power plant performance thanks to deeper system understanding
- TRACK technical issues in your power plant down to the specific single module location
- DIAGNOSE the root cause of downtime and low efficiency thanks to vast data analysis capability
- BE INFORMED of developing problems with real time alerts
- REDUCE maintenance interventions and increase their precision



Full control over power plant performances with AEG IMM's smart monitoring

### ENERGY STORAGE

4 kWh

8 kWh

12 kWh

A reliable energy source with premium aesthetic for your home

Nominal storage capacity 3.84 kWh Usable storage capacity 3.45 kWh Lithium battery (LFP) Integrated hybrid inverter Dimensions 700 x 340 x 1235 mm

Matte black / Matte white housing, LCD

Product Warranty: 6000 cycles

Long-lasting charge and sleek looks, providing energy for all house needs

Nominal storage capacity 7.68 kWh Usable storage capacity 6.90 kWh Lithium battery (LFP) Integrated hybrid inverter Dimensions 750 x 565 x 1335 mm

Matte black / Matte white housing, LCD

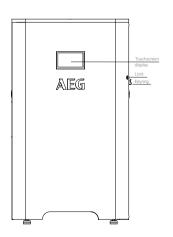
Product Warranty: 6000 cycles

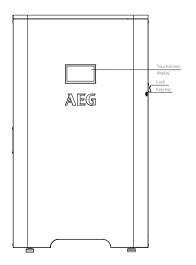
A savvy choice for larger household needs and commercial projects

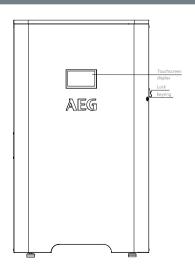
Nominal storage capacity 11.52 kWh Usable storage capacity 9.22 kWh Lithium battery (LFP) Integrated hybrid inverter Dimensions 750 x 565 x 1335 mm

Matte black / Matte white housing, LCD

Product Warranty: 6000 cycles







# BALANCE AND POWER, WHENEVER YOU NEED

#### ADJUSTING TO YOUR DAILY NEEDS

AEG energy storage solutions allow you to produce and use clean energy at your own tempo - day and night. It helps you save energy for the time you wish to use it, and when you need it the most.

The hybrid inverter integrated in the storage unit allows you to flexibly use power from your solar installation, using it with your home appliances, feeding it to the grid or saving it for later use.

From daily home appliance management to power outages, AEG storage solutions save, balance and smoothly redistribute power from your solar installation, granting you clean energy and peace of mind wherever you need, whenever you need.

#### **AEG ENERGY STORAGE PORTFOLIO**

The AEG energy storage units are scalable and currently available in three capacities

- 4 kWh for small-size installations
- 8 kWh for medium-size installations
- 12 kWh for medium-size installations



Let the sun shine at night. Your AEG storage unit saves energy during the day for nightime use

# WORLDWIDE REFERENCES, WORLDWIDE NETWORK

#### **WORLDWIDE REFERENCES**

Since the start up, Solar Solutions has seen exceptional year-on-year growth. From the first signature projects in the UK (13.54 MWp, 2015), to the largest solar rooftop in Cuba (2 MWp, 2017); from the latest projects with AEG IMM technology in Hungary (4.2 MWp, 2018-2019), to the medical and training facilities of GTAG (the German Technical Advisory Group of the German armed forces Bundeswehr); from a multitude of elegant rooftop projects powering private homes in the Netherlands or universities in Brazil, AEG quality products are being successfully deployed globally thanks to a solid partner network.

Whether by helping schools in India, like Sacred Heart in Kerala, gain more energy independence, or by recapitalizing assets by transforming dilapidated rural buildings into smart barns through AEG IMM technology, AEG products are contributing day by day to a greener economy and a more sustainable future.

#### A GROWING PARTNER NETWORK

From Europe to Middle East, and from Africa to Latin America, our AEG partners are putting all their professionality and passion at the service of our customers, providing you with the same AEG customer experience that has proven so popular globally. Today, the AEG distribution network counts partners in over 30 countries worldwide.



A global partner network in over 30 countries. www.aeg-industrialsolar.de



#### OFFICIAL SUPPLIER OF AEG SOLAR PRODUCTS

Solar Solutions GmbH Brückenstrasse 94 60594 Frankfurt am Main Germany

- +49 69400500810
- info@aeg-industrialsolar.de
- www.aeg-industrialsolar.de