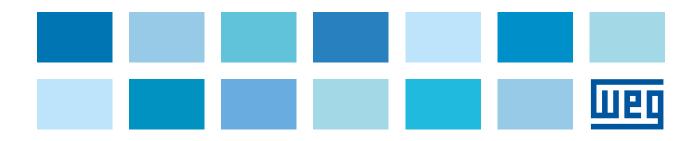


Solutions for Solar Energy





TECHNOLOGY MINIMIZING INDUSTRIAL CONSUMPTION. SUSTAINABILITY MAXIMIZING PEOPLE'S QUALITY OF LIFE.



The sun is an inexhaustible source of energy, and Brazil has an enormous potential for harnessing it. Allied to the principles of sustainability, WEG uses its experience and technology in converting this energy source into a complete Solar Energy solution, exploiting all sources of renewable energy in the energy distributed to customers.

Recognized on the market for supplying solutions for electric systems, WEG also offers full solutions for solar power generation, providing inverters, transformers, cubicles and substations, in addition to the whole integration engineering and application software. Furthermore, WEG can also supply parts and accessories according to the application needs in plants, industries, commercial and home buildings, and isolated systems.

SIW700 and SIW1500 Central Inverters

WEG has had decades of experience in developing industrial frequency inverters for diverse applications. And for serving the solar power plant market, we present the SIW700 and SIW1500 line of central inverters, and there is a broad range of power characteristics, designed to meet specific national climatic condition needs.



Main Characteristics

- Nationally manufactured inverter
- Registered in Finame BNDES
- Specialized technical support throughout the entire national territory
- Modular concept: simple and fast maintenance procedures
- Tropicalized
- 10% more power in temperatures over 40 °C (104 °F)
- Maximum DC voltages available: 1,000 V and 1,500 V

SIW600 String Inverter

The SIW600 is a versatile inverter for photovoltaic energy generation, developed with state-of-the-art technology to suit the requirements of commercial and industrial applications.

Main Characteristics

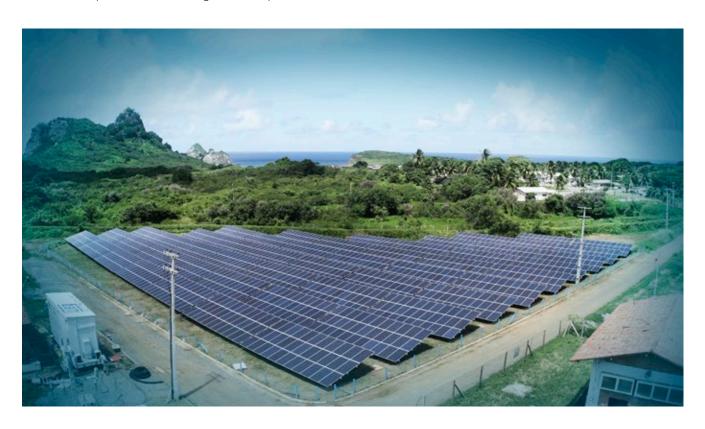
- Three-phase, 380 or 440 V ac power supply
- Direct connection to the line (Transformerless)
- Maximum efficiency >98%
- $\,\blacksquare\,$ Voltage of the photovoltaic cells of up to 1,000 V
- 2 MPPTs for maximum efficiency
- Degree of protection IP65 for outdoor installation
- Plug-in connections that can be accessed from outside
- Touch-sensitive keys and alphanumeric LCD display
- Modbus-RTU, EtherNet and USB communication interfaces
- Useful life of 20 years



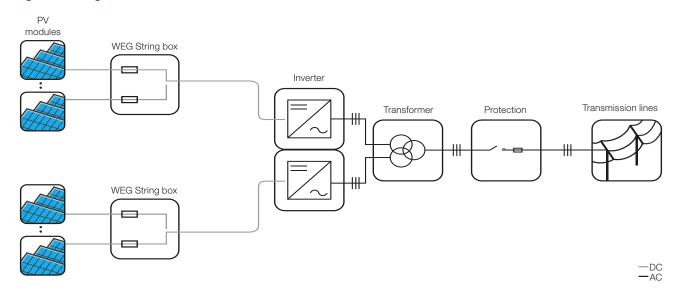


Solutions for PV Power Plants

WEG provides a complete and integrated solution for PV power plants, mixing and matching a broad line of inverters, transformers, protective, monitoring, and solar power station devices.



Single Line Diagram





Solutions for PV Power Plants

Solar Power Station

The WEG power stations are designed and manufactured custom-made and are modular designed, providing flexibility to supply PV power plants. They are assembled on a unique platform, integrate electronic and electrical systems. Their structure does away with the need for large-scale brickwork constructions and minimizes installation time. The integration and commissioning of the components while still in the factory assure safety and dependability in the installation.



Medium Voltage Switchgear

The WEG switchgear are assembled and tested for voltages from 2.3 kV to 36 kV in compliance with the NBR IEC 62.271-200 standard. Due to their modular configuration, assuring easy assembly and maintenance, thus such flexibility to adapt to the different requested characteristics in the solar generation sector. They are equipped with interlocking devices between the breaker switch compartment doors and their extraction carts. The breaker switch does away with maintenance and can be installed in the extracted position without any need for opening the door.



Dry and Oil Transformers

WEG is equipped with a complete line of transformers which are used for photovoltaic power plants and raising the BT generating voltage of the inverters to AT voltages, making it possible drain energy elsewhere. They are the best option for serving transformer demands providing greater safety, space savings, cost savings in the installation and maintenance of transformers insulated in epoxy resin.

This product line supplies solutions for all types of environments. Due to its encapsulation vacuum process and the quality of the resin used, thereby providing the absence of partial discharges and greatly increasing the useful life of the transformer.



Note: the power ratings are available from 112.50 to 20,000 kVA, with protection level up to IP55.

Substation

Conventional Substations

For primary substations we provide dedicated solutions to meet each customer's needs. They are turn-key regime substations, delivered and supplying power to over 350 substations at all different voltage levels up to 550 kV. It applies its own technology as there is an internal team of application engineering and specialized executions, seeking continual enhancement of solutions for customers, guaranteeing dependability, efficiency and durability.

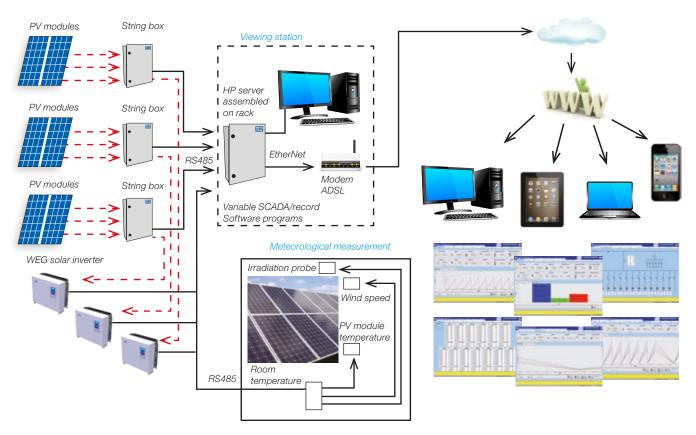


The industrial process is highly verticalized, adding flexibility and agility in delivery, also guaranteeing the components the same quality standard.

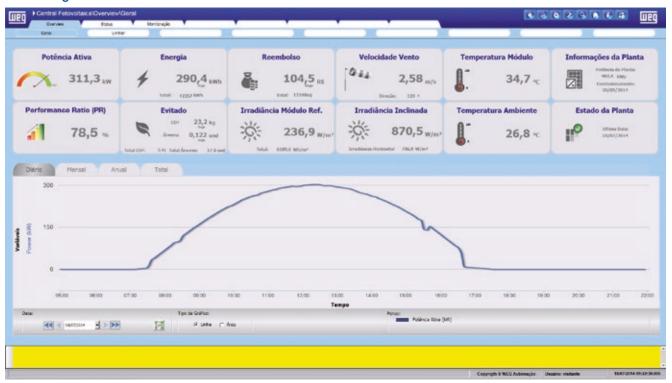


Monitoring System

Dependable monitoring systems are essential for optimal performance of photovoltaic power plants. On-line access to such information as network parameters, layouts, inverters, and even meteorological conditions help in managing the power plant, facilitating the operation and maintenance planning. WEG introduces a new concept in data acquisition and employs state-of-the art technology in wireless networks and internet access.



Monitoring Screen



WEG String (1,000 V dc and 1,500 V dc)

Concentrated string modules with a capacity of up to 15 DC inputs.



Data Acquisition System

- Voltage and current by string
- Power generated by string
- Fuse burning diagnostics by string
- Actuated surge protection module diagnostics (DPS)
- Decreased performance detection in the string
- Managing alarms
- Historical record on collected variables

- Historical alarm record
- Performance calculation functions
- Graphic viewing functions
- Maintenance follow-up report
- Collected data storage
- Access to data via web/Wi-Fi
- Possibility to use tablets or smartphone for monitoring



Distributed Generation

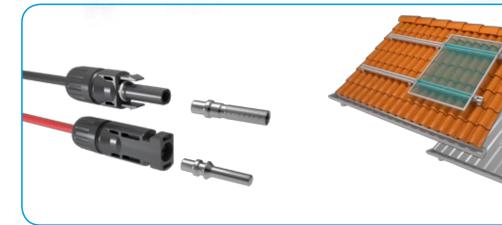
In a partnership with the photovoltaic system panel builders, WEG supplies distributed generation kits all over the country and offers immediate support for customers who seek to invest in new installations and/or maintenance of systems already installed.

Content of the Kit

- Polycrystalline silicon photovoltaic modules
- Single-phase/three-phase inverter
- Metal mounting frame
- MDW mini circuit breaker
- SPW surge protection devices
- MC4 connector pairs
- Special solar cable (red and black)











Global Presence

With more than 30.000 employees worldwide, WEG is one of the largest electric motors, electronic equipments and systems manufacturers. We are constantly expanding our portfolio of products and services with expertise and market knowledge. We create integrated and customized solutions ranging from innovative products to complete after-sales service.

WEG's know-how guarantees our Solutions for Solar Energy is the right choice for your application and business, assuring safety, efficiency and reliability.



Availability is to have a global support network



Partnership is to create solutions that suits your needs



Competitive edge is to unite technology and inovation

Know More

High performance and reliable products to improve your production process.

Excelence is to provide a whole solution in industrial automation that improves our customers productivity.

Visit:

www.weg.net





WEG Worldwide Operations

ARGENTINA

San Francisco - Cordoba Phone: +54 3564 421484 info-ar@weg.net

Cordoba - Cordoba Phone: +54 351 4641366 weg-morbe@weg.com.ar

Buenos Aires Phone: +54 11 42998000 ventas@pulverlux.com.ar

AUSTRALIA

Scoresby - Victoria Phone: +61 3 97654600 info-au@weg.net

AUSTRIA

Markt Piesting - Wiener Neustadt-Land Phone: +43 2633 4040 watt@wattdrive.com

BELGIUM

Nivelles - Belgium Phone: +32 67 888420 info-be@weg.net

BRAZIL

Jaraguá do Sul - Santa Catarina Phone: +55 47 32764000 info-br@weg.net

CHILE

La Reina - Santiago Phone: +56 2 27848900 info-cl@weg.net

CHINA

Nantong - Jiangsu Phone: +86 513 85989333 info-cn@weg.net

Changzhou – Jiangsu Phone: +86 519 88067692 info-cn@weg.net

COLOMBIA

San Cayetano - Bogota Phone: +57 1 4160166 info-co@weg.net

ECUADOR

El Batan - Quito Phone: +593 2 5144339 ceccato@weg.net

FRANCE

Saint-Quentin-Fallavier - Isère Phone: +33 4 74991135 info-fr@weg.net

GERMANY

Türnich - Kerpen Phone: +49 2237 92910 info-de@weg.net

Balingen - Baden-Württemberg Phone: +49 7433 90410 info@weg-antriebe.de

Homberg (Efze) - Hesse Phone: +49 5681 99520 info@akh-antriebstechnik.de

GHANA

Accra
Phone: +233 30 2766490
info@zestghana.com.gh

INDIA

Bangalore - Karnataka Phone: +91 80 41282007 info-in@weg.net

Hosur - Tamil Nadu Phone: +91 4344 301577 info-in@weg.net

ITALY

Cinisello Balsamo - Milano Phone: +39 2 61293535 info-it@weg.net

JAPAN

Yokohama - Kanagawa Phone: +81 45 5503030 info-jp@weg.net

MALAYSIA

Shah Alam - Selangor Phone: +60 3 78591626 info@wattdrive.com.my

MEXICO

Huehuetoca - Mexico Phone: +52 55 53214275 info-mx@weg.net

Tizayuca - Hidalgo Phone: +52 77 97963790

NETHERLANDS

Oldenzaal - Overijssel Phone: +31 541 571080 info-nl@weg.net

PERU

La Victoria - Lima Phone: +51 1 2097600 info-pe@weg.net

PORTUGAL

Maia - Porto Phone: +351 22 9477700 info-pt@weg.net

RUSSIA and CIS

Saint Petersburg Phone: +7 812 363 2172 sales-wes@weg.net

SOUTH AFRICA

Johannesburg Phone: +27 11 7236000 info@zest.co.za

SPAIN

Coslada - Madrid Phone: +34 91 6553008 wegiberia@wegiberia.es

SINGAPORE

Singapore Phone: +65 68589081 info-sg@weg.net

Singapore

Phone: +65 68622220 watteuro@watteuro.com.sg

SCANDINAVIA

Mölnlycke - Sweden Phone: +46 31 888000 **info-se@weg.net**

UK

Redditch - Worcestershire Phone: +44 1527 513800 info-uk@weg.net

UNITED ARAB EMIRATES

Jebel Ali - Dubai Phone: +971 4 8130800 info-ae@weg.net

JSA

Duluth - Georgia Phone: +1 678 2492000 info-us@weg.net

Minneapolis - Minnesota Phone: +1 612 3788000

VENEZUELA

Valencia - Carabobo Phone: +58 241 8210582 info-ve@weg.net

For those countries where there is not a WEG own operation, find our local distributor at www.weg.net.



WEG Group - Automation Business Unit Jaraguá do Sul - SC - Brazil Phone: +55 47 3276 4000 automacao@weg.net www.weg.net

