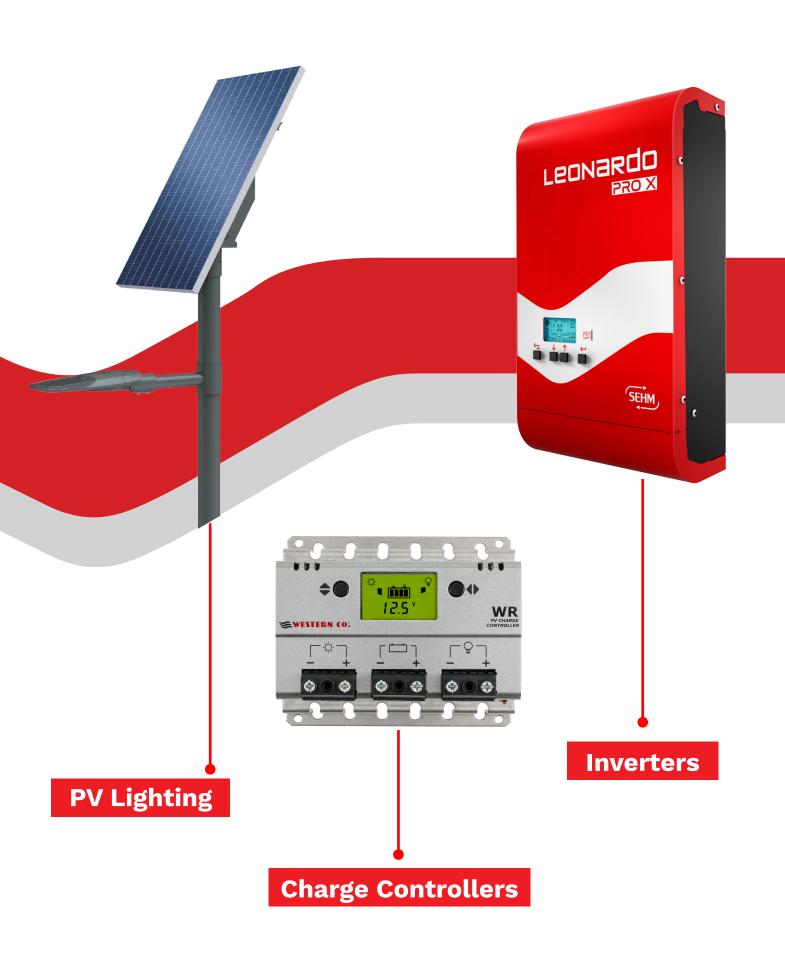


ELECTRONIC EQUIPMENTS - SOLAR SYSTEMS





Western Philosophy

Looking to the future is a duty for all companies that want to keep up with the market.

Addressed towards international development dynamics, our company draws inspiration from strong values such as innovation, integrity, excellence in service and respect for the environment to achieve high levels of quality and reliability.

Through the pages of this Company Profile we want to tell about us and the goals achieved in the field of solar energy in 30 years of constant and uninterrupted investment in research and technology. The know how acquired by our team make today Western CO a reference company in the off grid photovoltaic sector.

Our systems meet people's needs without resorting to incentives or external aid.

Today we can finally assert that on photovoltaic LED lighting systems as well as energy production and storage systems this result has been fully achieved. We will continue on the way of sustainable development to improve everyone's quality of life for years to come.



Company History



In the 70 s two friends, Giovanni Cimini and Bruno Olivieri, at that time students, began to build artisanal amplifiers and loudspeakers for their city's music groups and some primordial electric bikes with the CRA brand so as to allow trips on weekends during the 1973 oil crisis. Following the good results obtained by their first artifacts, in 1979 they founded, with a million lira, the CRA Elettronica based in the Cimini's garage. The new company dedicate its efforts to manufacture small loudspeakers and to produce electronic cards for Farfisa Spa (Lear Seagler group), at that time world leader in the production of musical keyboards.

The two partners, already aware of how the availability of energy was a primary goal for the company, were the first to manufacture in Italy a rudimentary photovoltaic panel for charging the batteries and jointly procuced a small charge controller and a 500 W wave inverter square Giovanni Cimini, strongly believing in the development of solar energy applications, began to travel to Spain assiduously.

There, in fact, the solar market had already begun a timid but remarkable start and Giovanni wanted to inquire as much as possible about the opportunities and technological developments of that sector to insert it as an

integral part of the company. In 1984 CRA Elettronica changes its name to Western CO The name.

Western derives from the passion of the two owners for the comics' genre, for freedom and of course for Western movies, very popular during their youth. The final CO derives from the two surnames Cimini and Olivieri. With the ambition that the name would have been widely echoed in the future.

The results do not wait long Collaboration begins with large companies such as Siel Olivetti, Itema Villeroy Boch Indel B, Roland and many others.

In 1990 the historical site and the two small production units located in the surrounding area were merged and transferred to their current location in Via Pasubio.

For the first time in their region, a new fully automated and highly technological department has been created for the assembly of SMD electronic components Surface Mounting Device).

At the same time, an ambitious project was developed in those years for the development of an integrated solar energy production and storage system that will give rise to the well known Leonardo System range on the market today.

In 1997 in Amsterdam, during The World Sustainable Trade Fair an avant garde exhibition on new energies, a very expensive first SOX lamp was discovered.

Upon returning, Western CO immediately begins the development of its own high tech photovoltaic street lamp. The product is installed and tested at the INFN (National Institute of Nuclear Physics) and then placed on the market.

From that moment on, the company is constantly dedicated to developing products for energy independence and the widespread production of energy from renewable sources.



Steps ahead

In 2002 with the Russian House branch of the Russian Academy of Sciences and together with the Polytechnic University of Marche UNIVPM the Tornado Like was developed an innovative wind generator that exploits the principle of the hurricane.

In 2004 with a group of companies of Tecnomarche technology park, fullfiled the project of the first Ecological House of the Marche region completely independent powered by renewable sources and interconnected by Zig Bee.

In 2006 the Western CO wins the prize for innovation and creativity of Unioncamere Marche Viva L'impresa L'impresa è Viva.

In 2007 the Western CO is included among the 100 Italian excellences in the Eurispes Companies' Report.
In 2010 inaugurates a new production line with in circuit testing (to increase the reliability of its products to

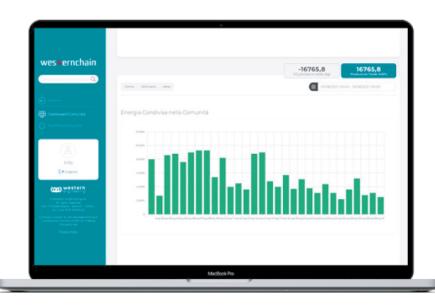
which the Guarantee had been extended up to 5 years.

In 2015 from the Western CO R&D Department born Western Engineering Srl which strengthens the research of the mother company and opens the collaboration to new partnerships.

In 2017 the two entities work together on the SEMMY project (Smart Energy ManageMent sYstem for the exchange of energy between prosumers This project gave birth to Westernchain a fully automated peer to peer energy exchange community certified by Blockchain technology.

Western CO today produces off grid photovoltaic systems and is considered one of the most competent companies in the sector both in Italy and in the world.





Mission & Vision

Mission

Creating systems for self production of energy from renewable sources.

Vision

Spreading the culture of energy efficiency, resource savings and widespread energy production.



Quality

Quality, not only of the products but of the entire production process. This is the priority for WESTERN CO.

From product conception to after sales assistance.

Quality in design and choice of equipments



The R&D Department, the spearhead of the company Thanks to a team composed by technicians, engineers and testers, WESTERN CO designs and produces systems and equipments internally.

Quality in the production



WESTERN CO is equipped with a completely Italian production process with high vertical integration.

Quality in functional tests



Technology's excellence is enhanced by the guarantee of a daily, careful and rigorous testing process to measure the functionality and efficiency of each single product produced.

Quality in packaging and shipping



The activity is extremely transversalfrom order to production to shipment, everything is constantly checked to ensure the effectiveness and efficiency of the distribution system of theproduct.

Customer Care



The company is aware of how it is essential to ensure care and assistance over the time with the utmost readiness and effectiveness to meet all the customer's needs.

Quality management

Western CO is equipped with an ISO 9001 quality management system certified by RINA as well as a certified process for metal structures EN 1090 1 by RINA.





References

- Register at MIUR (Ministry of Education, University and Research)
- Member of ANIE (Confindustria Federation that represents electrotechnical and electronic companies)
- Member of Confindustria Centro Adriatico
- Member of Italia Solare (Association that promotes, educates and informs about photovoltaic solar energy)
- Member of Alliance for Rural Electrification
- SMAU Innovation Award 2021













Patents

- GALILEO mono axial solar tracker
- Votive lighting system
- Radio and GSM control for stand alone PV systems
- LEONARDO energy self production system
- RPU integrated energy production system Renewable Power unit
- Photovoltaic system with Leonardo CUQ power control system
- 230 AC LED lamp connected to the W LIGHT network
- LED PV lamp for street lighting W LIGHT
- GLOBE street Light furniture
- WESTERNCHAIN energy exchange and sharing system

Western in the world

The company has known over the years an increasing interest even outside national borders.

The international recognition of the reliability of Western CO Solutions has allowed to expand both in the markets of developing countries and in advanced economies.

The main export countries are, in fact: Brazil, Colombia, Perù Haiti, Venezuela, Egypt, Tunisia, Morocco, Algeria, Togo, Mali, Senegal, Cameroon, Congo, Mauritius, Sudan, United Kingdom, Sweden, Norway, France, Germany, Spain, Portugal, Greece, Belgium, Nederland, Poland, Romania, Croatia, Albania, Czek Republic, United Arab Emirates, Iraq, Kuwait, Qatar, India.



PV Lighting

- Off-grid systems that have LED technology equal to the on-grid ones with very high-efficiency lamps
- Certainty of the service even in absence of the sun thanks to a specially designed algorithm
- Bluetooth and GSM monitoring everywhere





Charge Controllers

- Systems with the highest MPPT technology
- Charging of one or more batteries: GEL, LiFePO4, lithium ions with CAN BUS communication
- Modularity of the systems and remote control











Inverters

 Off-grid systems from 3 kW to 48 kW also in three-phase applications with integrated monitoring web portal and App

• Systems for new highly efficient on-grid PV plants with and without storage

• Retrofit systems on PV plants grid-connected for storing the self-consumed energy







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