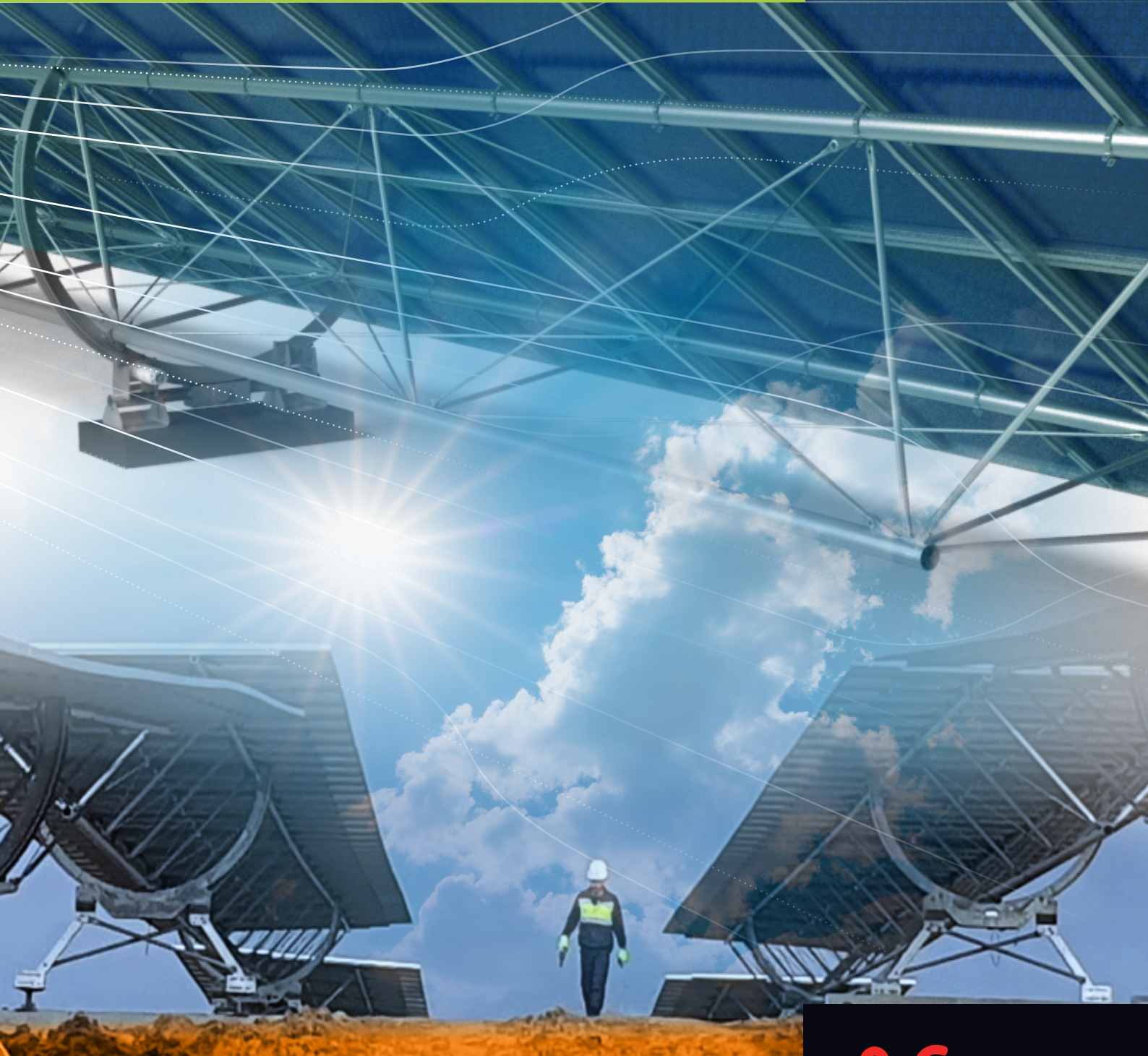


**KEYLIOS®**

INNOVATIVE TRACKER SYSTEM AND SERVICES  
TO ENSURE EFFICIENCY AND RELIABILITY  
OF SOLAR FARM ASSETS





**KEYLIOS®**

AN INCREASING ADOPTION SOLAR FARMS  
TO A LOW CARBON ECONOMY



## Decarbonization has become a global issue against global warming

The international public concern received a further boost by the Paris Agreement negotiated during the 2015 UN Climate Change conference, COP 21, in which 195 countries committed themselves to limit greenhouse gases to below 2% in coming years in keeping with Intended Nationally Determined Contributions (INDCs) based on data submitted per country and per inhabitant.

This effort was pursued in Marrakech (Morocco) in 2016, and Bonn (Germany) in 2017.

Solar Photovoltaic (PV) is well on track to reach the Sustainable Development Scenario (SDS) level by 2030, which will require electricity generation from solar Photovoltaic (PV) to increase 15% annually, from 720 TWh in 2019 to almost 3 300 TWh in 2030.

Global annual solar PV additions are expected to accelerate in the coming decade, owing to faster recovery of distributed PV applications as the global economy

improves. Outside of government support schemes, market drivers such as corporate PPAs and bilateral contracts are forecasted to support PV expansion globally.

One of the major benefits of large-scale generation is that plants can be built relatively quickly, often within a year, compared to hydro and fossil fuel projects that may require five years to complete. This not only means enhanced savings for initial investment, but also lower long-term maintenance costs.

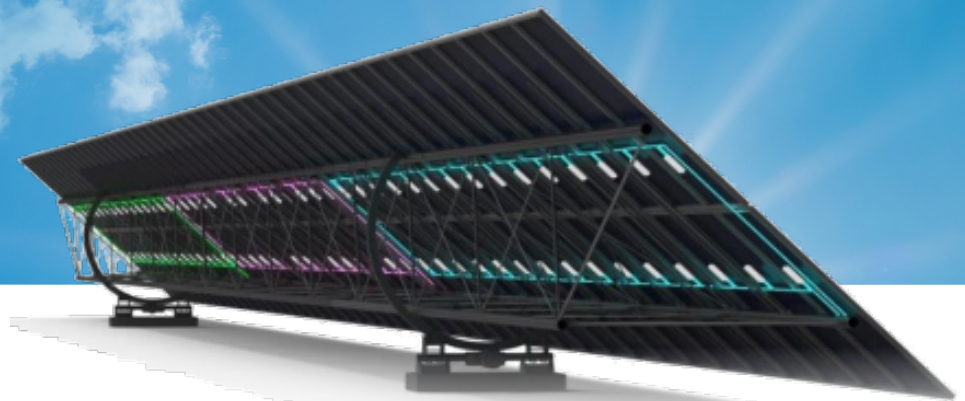
To ensure the viability of your PV plant based on your specific economic, social and environmental concerns, a reliable and efficient tracker is needed, including a well-balanced power and data cable infrastructure to ensure low costs and optimal performance.

Nexans unique offer with the entire design and supply of the tracker and associated cables participate to the market development.

### What you expect from your tracker solution supplier

- ▶ CAPEX and OPEX savings to meet competitive Power Purchase Agreements and Return of Investments (ROI) targets
- ▶ A high reliability for ensuring the highest utilization rate and energy production
- ▶ Ready for challenging site conditions
- ▶ Robust design with minimal footprint and maintenance
- ▶ Fast and trouble free installation
- ▶ Engineering competences to support your own engineering team
- ▶ Single point of responsibility and liability with a unique value proposition driving the solar farm efficiency and combining the engineering integration of products into a solution, from design until maintenance phases

# A NEW APPROACH TO SOLAR FARMS



## INTEGRATED SOLUTION

## ENGINEERING PARTNER

## INDUSTRIALIZED INSTALLATION

## DURABLE DESIGN

Nexans offers an innovative system combining engineering, supply, installation of trackers. We participate from the earliest stage of your project, offering engineering support to optimize the solar farm lay out and output.

An end-to-end offer combining KEYLIOS® Tracker, cables and connectivity from solar plant to utility grid.

Nexans works in collaboration with Developers and Asset owners, designing advanced specialized systems maximizing investment returns while finding optimization possibilities with Engineering Procurement Construction (EPC).

**Our widely acclaimed KEYLIOS® solution** can outfit a complete utility scale photovoltaic power plant, assuring that all elements are fully interoperable and compatible and meet PV Plant International standards.

**Our experience** provides timeless reliability; combined with our engineering simplicity we provide solutions for the most severe terrain, designed with the lowest number of components reducing the time of installation, limiting the wind failure impact and maintenance tasks.

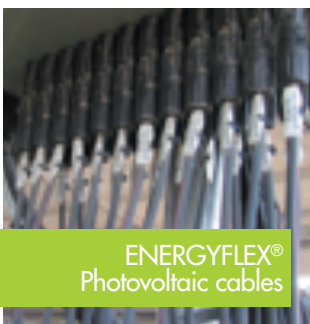
**Our innovative designs** contribute to accelerating the energy transition with the main objective of making solar energy as one of the top 3 sources of power in our world.



KEYLIOS® Tracker 2V



Nexans Photovoltaic harnesses



ENERGYFLEX® Photovoltaic cables

## KEYLIOS®, your best choice

### A trouble-free in-house engineering

- ▶ System integration (trackers and cables) by the same manufacturing group.

### The most advanced tracker installation concept

- ▶ The only tracker in the world with factory pre-assembled sub-systems and remote site assembly industrialization.
- ▶ One of the shortest assembly time for erecting your solar farm asset with less dependence on the overall ambient and field conditions.

### A proven high tolerance to streamline installation

- ▶ The harshest grounds thanks to 2 foundations per tracker.

### The most innovative tracker design

- ▶ The 2 tie beams deliver 450% foundations cost saving on terrains preventing underground foundations.

### Powered by Nexans

- ▶ The largest cables product portfolio for solar farms: complete power (LV/MV/HV) and data transmission (copper and fiber) infrastructures.



# KEYLIOS® TRACKER

## The bright solution

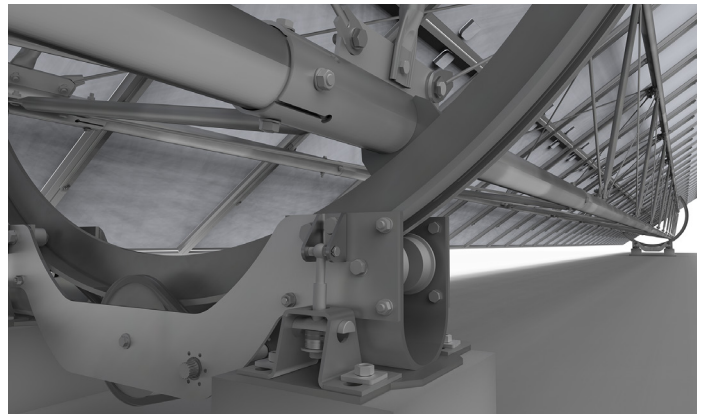
The viability of your photovoltaic power plant, in accordance with your specific economic, social and environmental requirements, requires a balanced infrastructure with trackers equipped with power and data cables to guarantee reduced costs and optimal performance.

**A 2P LATTICE STRUCTURE FOR ROBUSTNESS**

**2 FOUNDATIONS PER TRACKER  
56 FOUNDATIONS PER MW**

**ON SITE INDUSTRIALIZED INSTALLATION - 10 MAN HOURS PER TRACKER**

**MAXIMUM RELIABILITY FOR MINIMUM MAINTENANCE**



KEYLIOS® patented tracker with a mesh structure brings a new way for enlarging the possibilities of utility-scale farm plant site considerations while leveraging the benefits of a unique simple design contributing to a safe and fast installation and on the most complicated terrains.

<b>Tracking type</b>	▶ Horizontal single axis tracker
<b>Utilization</b>	▶ Photovoltaic Utility-Scale Power Plants
<b>Modules configuration</b>	▶ In Portrait (2P) - configurable
<b>East-West Tracking</b>	▶ Up to 110° (±55°), Optional (±60°)
<b>Dimension</b>	▶ L x W x H: 34 - 45m x 4m x 2m
<b>Coverage ratio - GCR</b>	▶ Configurable, 30% up to 50%.
<b>Permissible slope</b>	▶ Up to 15%
<b>Assembly</b>	▶ Industrial assembly on site, with pre-assembled components in factory
<b>Foundations</b>	▶ 4 piles per tracker – 112 piles per MWc 2 concrete beams 56 concrete beams per MWc
<b>Certifications</b>	▶ CE – CPP
<b>Tracker Design</b>	▶ ASCE 7-10   EUROCODE 0,1 & 3
<b>Warranty</b>	▶ 10 years on the structure - 5 years on the control and command system and motor



# A WINNING LIGHTNING EQUATION



## What will be your benefits while working with Nexans

### DEVELOPERS

- ▶ Start your Commercial Operating Day on time
- ▶ Benefit from unique wind resistance of KEYLIOS® tracker for maximizing your productivity and energy generation
- ▶ Be safe with a professional project management and supervision
- ▶ Limit your technical risk exposure with an in-house customized solution integrating trackers and cabling systems

### EPCs

- ▶ Take advantage of KEYLIOS® tracker wide terrain adaptability
- ▶ Reduce your installation time and cost with the 2 foundations design
- ▶ Secure your installation planning with our industrialized remote tracker assembly workshops while safe guarding your quality and safety standards
- ▶ 1 partner = 1 liability

## Full scope of services from design to delivery, installation and commissioning

- Pre-assembled structure ensuring less than 10 man-hours per tracker
- Optimized industrialized remote installation improving safety and efficiency levels
- Lower assembly cost and higher flexibility to maximize yield and performance

## Remote industrialized assembly workshops





## Nexans' KEYLIOS® for sustainable solar energy

### GLOBAL EXPERTISE

As the world's leading cable manufacturer, we have a unique geographical, industrial, and commercial presence in all markets. We also work closely with the entire chain of solar players, including panel and junction manufacturers, systems integrators, wholesalers, installers and project developers.

### LOCAL PRESENCE

Nexans is increasingly a global company, combining global reach with sensitivity to local production needs and solar projects. Operating on all continents, we are able to follow installers, project developers and OEMs everywhere, often working with local resources to organize technology transfers and training.

### TECHNICAL EXPERTISE

With a long acquired expertise in cable design, materials, standards, and technology, we have continued to expand our offer, moving from being a product supplier to being a responsive provider of solutions and services, backed up by the R&D resources of our Nexans Research Center (NRC).

## About Nexans

Nexans is a global player in energy transition. Our purpose: electrify the future. For over a century, Nexans has played a crucial role in the electrification of the planet. With around 25,000 people in 38 countries, the Group is leading the charge to the new world of electrification: safer, sustainable, renewable, decarbonized and accessible to everyone. In 2020, Nexans generated 5.7 billion euros in standard sales.

The Group designs solutions and services along the entire value chain in three main business areas: Building & Territories (including utilities and e-mobility), High Voltage & Projects (covering offshore wind farms, subsea interconnections, land high voltage), and Industry & Solutions (including renewables, transportation, oil and gas, automation, and others).

Corporate Social Responsibility is a guiding principle of Nexans' business activities and internal practices. As a signatory of the Global Compact since 2008, Nexans is committed to contribute to a responsible global economy and strives to promote the ten principles defined by the UN to all its stakeholders. The Group pledged to contribute to carbon neutrality by 2030 and was the first cable provider to create a Foundation supporting sustainable initiatives bringing access to energy to disadvantaged communities worldwide. Nexans' commitment to developing ethical, sustainable and high-quality cables also drives its active involvement within leading industry associations, including Europacable, the NEMA, ICF and CIGRE.

Nexans is listed on Euronext Paris, compartiment A.

For more information, please visit: [www.nexans.com/keylios](http://www.nexans.com/keylios)  
contact.nst@nexans.com