



We connect and protect

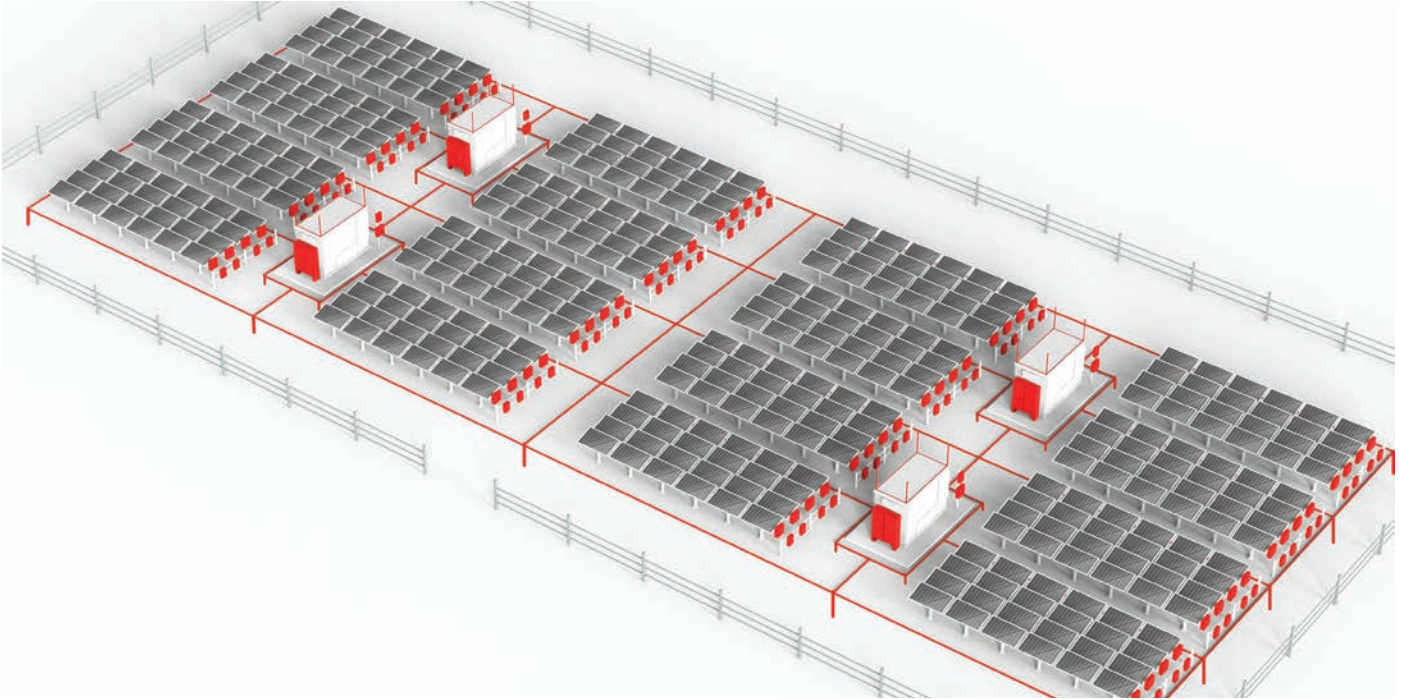
# nVent Solar Power Solutions



CADDY ERICO HOFFMAN ILSCO SCHROFF TRACHTE

[nVent.com](http://nVent.com)

# nVent Connects and Protects a more Sustainable and Electrified World



Renewable energy infrastructure demands stronger, more dependable electrical system connections to ensure safe and productive operations. The typical solar power array is designed for at least 30 years of reliable service—it is imperative to construct systems with electrical and fastening products specifically designed to provide consistency and confidence over the life of the installation.



#### Critical Asset Protection

nVent protects valuable electrical equipment and electronic systems, with solutions designed to prevent and mitigate damage that can be extremely costly.



#### Safety and Reliability

nVent provides high-quality solutions that perform reliably in service over the long-term to avoid costly replacement of equipment.



#### Trusted Expertise and Product Range

nVent is here as a technology partner to solve solar electrical and fastening challenges including meeting industry certifications. Our system design consultation services help avoid costly and time-consuming development time.



Click or Scan this to see the Virtual page.

In recent years, solar has emerged as one of the fastest growing renewable energy sectors with a focus on commercial, residential and utility applications alike. Balancing current needs from stable energy sources against increasing power demands has led to an unprecedented expansion of solar technology developments and rapid growth.

For supporting the market evolution, nVent offers a wide and comprehensive range of proven solutions already at work in solar energy installations around the globe.

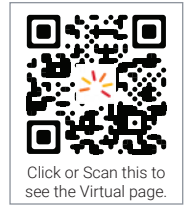


# Electrical Connections Solutions for Solar Power





# Photovoltaic (PV) Array



nVent offers a full line of fasteners to mount the photovoltaic panels and secure the cables. Large-scale, utility-led PV installations are growing numerous and grid modernization efforts demand strength and stability.

nVent is a leading manufacturer of grounding and bonding, lightning protection, low-voltage power distribution, fastening and concrete solutions for solar power infrastructure. We can better protect your PV installation from harsh environmental conditions with inventive features that meet applicable domestic and international standards.

## Products for Contractors and Specifying Engineers

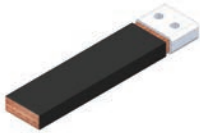
- 1 nVent ERIFLEX Flexbus
- 2 Ground Braids and Straps

## Products for Contractors

- 3 Grounding and Bonding Solutions
- 4 Lightning Protection
- 5 Fastening Solutions
- 6 Exothermic Bonds
- 7 Bolt Couplers
- 8 Surge Protective Devices
- 9 nVent CADDY Speed Link Catenary

# Photovoltaic (PV) Array

## Products for Contractors and Specifying Engineers



### nVent ERIFLEX FlexBus

In applications including solar inverter boxes, the nVent ERIFLEX FlexBus System provides a patented connection solution between two pieces of electrical equipment. This unique concept provides faster installation and reduces total installation cost without additional design study, a specialized workforce or expensive tools.



### Ground Braids and Straps (MBJ & CPI)

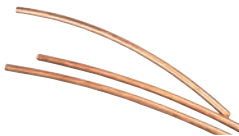
Braids for bonding various grounded parts together for personnel safety and reliability.

## Products for Contractors



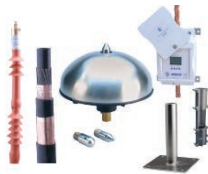
### Grounding and Bonding Solutions

nVent ERICO offers a wide range of premium, high-quality ground and bonding solutions which meet industry standards including ground rods, nVent ERICO Cadweld, grounding busbar, ground enhancement material and more.



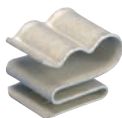
### Grounding Conductors

nVent ERICO conductors are purposefully engineered to industry standard material and dimensional requirements. Get insulated and non-insulated round, tape, Cu-Bond round, Cu-Bond composite and theft deterrent conductors in standard spool lengths or cut to order.



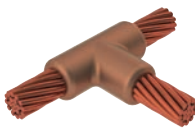
### Lightning Protection

nVent ERICO manufactures lightning protection systems in full accordance with 12 major industry standards, including systems based on optimized air terminals and placement as well as isolated conductor systems. Reliable protection of property and personnel demands a comprehensive approach to minimizing threats.



### Fastening Solutions

nVent CADDY offers products that are suitable for thousands of electrical and datacom applications, from snap clips to metal pressure clips and J-Hooks, to a full range of wire basket trays, perforated cable trays and cable ladders.



### Exothermic Bonds

The nVent ERICO Cadweld molecular bonding process is superior to any known mechanical or compression-type surface-to-surface contact connector. Cadweld bonds provide current carrying (fusing) capacity equal to the conductor, are UL Listed, and satisfy IEEE® Standard 837.



### Bolt Couplers

Bolt couplers, part of the nVent LENTON line of concrete products, provide a full-strength joint between a reinforcing bar and a standard parallel thread bolt. They are typically used to tie a pedestal base to the foundation and to anchor miscellaneous equipment to the foundation.



### Surge Protective Devices

The nVent ERICO TDS50 series of surge protective devices provide economical and reliable protection from voltage transients on solar PV systems. The series consists of models specifically designed for 24 to 1,000 DC voltage systems that are easy to install in combiner boxes or inverters.



### nVent CADDY Speed Link Catenary

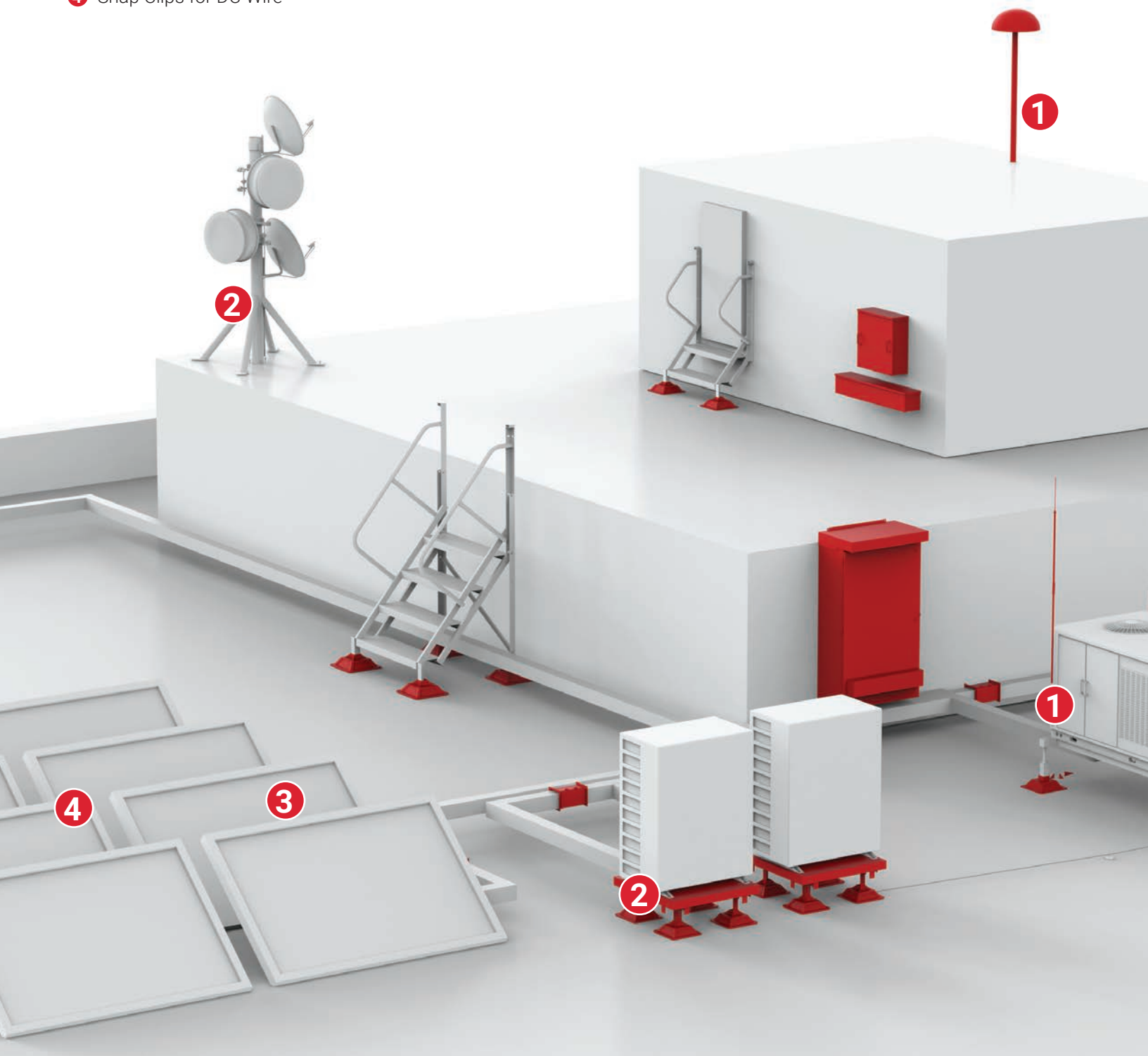
The nVent CADDY Speed Link Catenary System provides an easy- and fast-to-install fixing solution for commercial buildings where structural supports are far apart.



# Photovoltaic (PV) Array - Rooftop

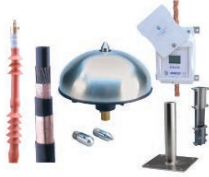
## Products for Contractors

- ① Lightning Protection
- ② Rooftop Support
- ③ Grounding and Bonding Solutions
- ④ Snap Clips for DC Wire



# Photovoltaic (PV) Array - Rooftop

## Products for Contractors



### Lightning Protection

nVent ERICO manufactures lightning protection systems in full accordance with 12 major industry standards, including systems based on optimized air terminals and placement as well as isolated conductor systems. Reliable protection of property and personnel demands a comprehensive approach to minimizing threats.



### Rooftop Support

nVent CADDY Pyramid rooftop supports offer superior load capacity and dramatically reduce installation time by replacing slow, heavy and labor-intensive methods to support pipes, conduits, ducts, cable trays and equipment.



### Grounding and Bonding Solutions

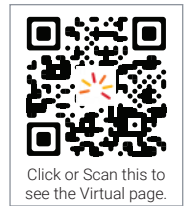
nVent ERICO offers a wide range of premium, high-quality ground and bonding solutions which meet industry standards including ground rods, nVent ERICO Cadweld, grounding busbar, ground enhancement material and more.



### Snap Clips for DC Wire

Clip snaps on flange and cable snaps into clip.

# Combiner Box

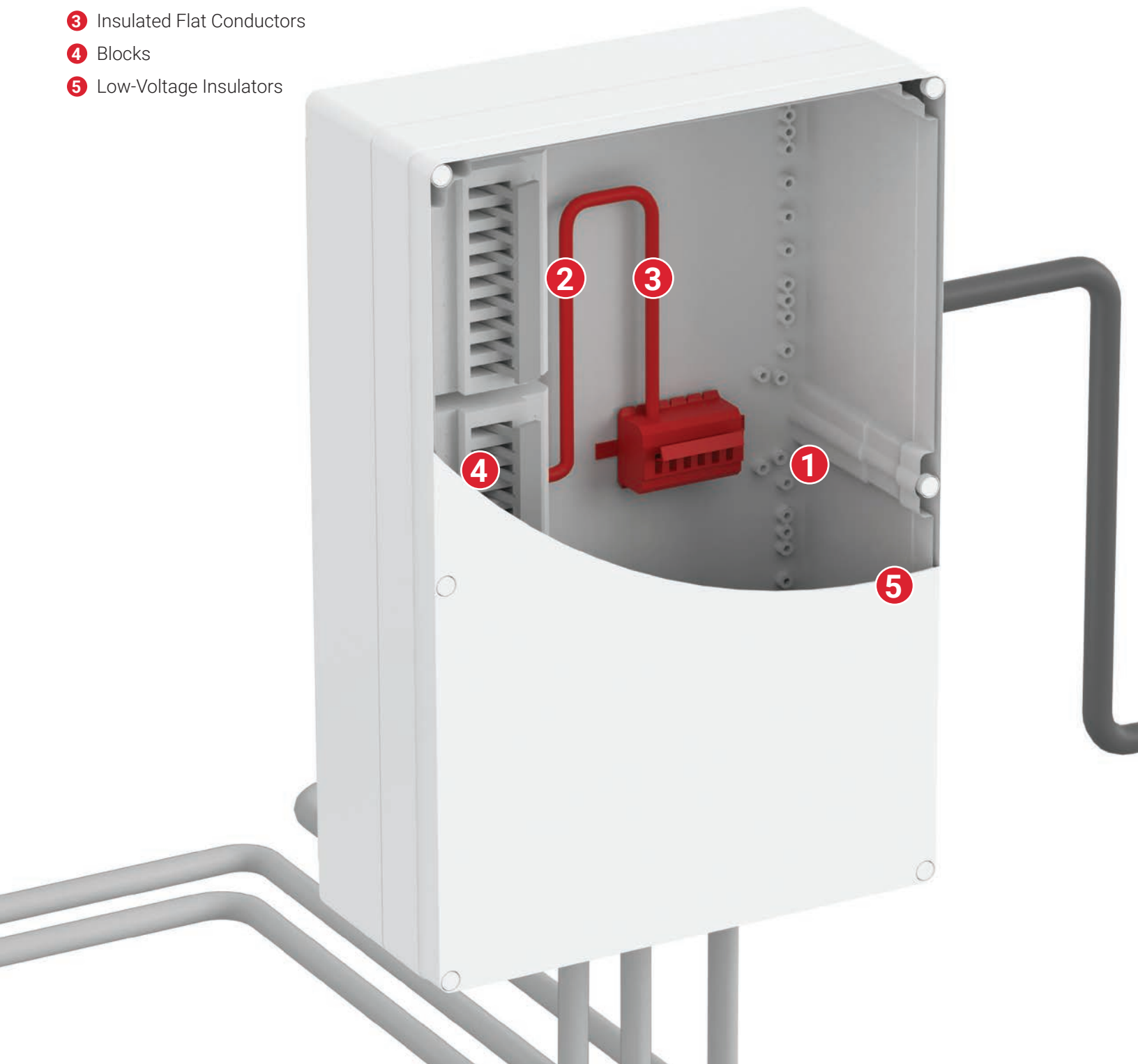


## Products for Contractors and Specifying Engineers

- ① Surge Protection Devices

## Products for Specifying Engineers

- ② nVent ERIFLEX Flexibar
- ③ Insulated Flat Conductors
- ④ Blocks
- ⑤ Low-Voltage Insulators





# Combiner Box

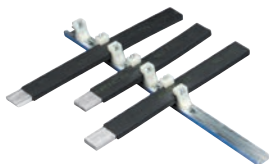
## Products for Contractors and Specifying Engineers



### Surge Protection Devices

The nVent ERICO TDS50 series of surge protective devices provides economical and reliable protection from voltage transients on solar PV systems. The series consists of models specifically designed for 24 to 1,000 DC voltage systems that are easy to install in combiner boxes or inverters.

## Products for Specifying Engineers



### nVent ERIFLEX Flexibar

nVent ERIFLEX Flexibar Advanced supports secure Flexibar without damaging the insulation and ensure correct spacing for optimum cooling. Find options for supporting up to eight conductors in parallel or creating up to three 25.6 inches (650 mm) supports capable of holding four nVent ERIFLEX Flexibar.



### Insulated Flat Conductors

IBS/IBSB Advanced Insulated Braided Conductor from nVent is the ideal ready-to-install, flexible wire replacement solution. It is specifically designed for connections to all molded case circuit breakers, including the most compact breakers, without any additional accessories such as connectors, spreaders or extenders.



### Blocks

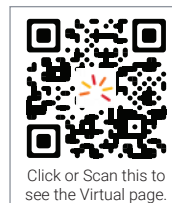
nVent ERIFLEX single-pole distribution blocks easily clip onto DIN rail or mount to panels with screws and are compliant with IEC 60947-7-1 and UL 1059. Two- and four-pole distribution blocks also provide an easy connection with solid bars for greater reliability. Find power blocks and splice blocks as well for making reliable connections.



### Low-voltage Insulators

nVent ERIFLEX low-voltage insulators are made from a halogen-free unsaturated polyamide reinforced with 30% minimum glass fiber. The insulators meet UL 94 VO requirements for self-extinguishing materials and work in temperatures from -40°F to 266°F (-40°C to 130°C).

# Inverter and String Inverters



## Products for Contractors and Specifying Engineers

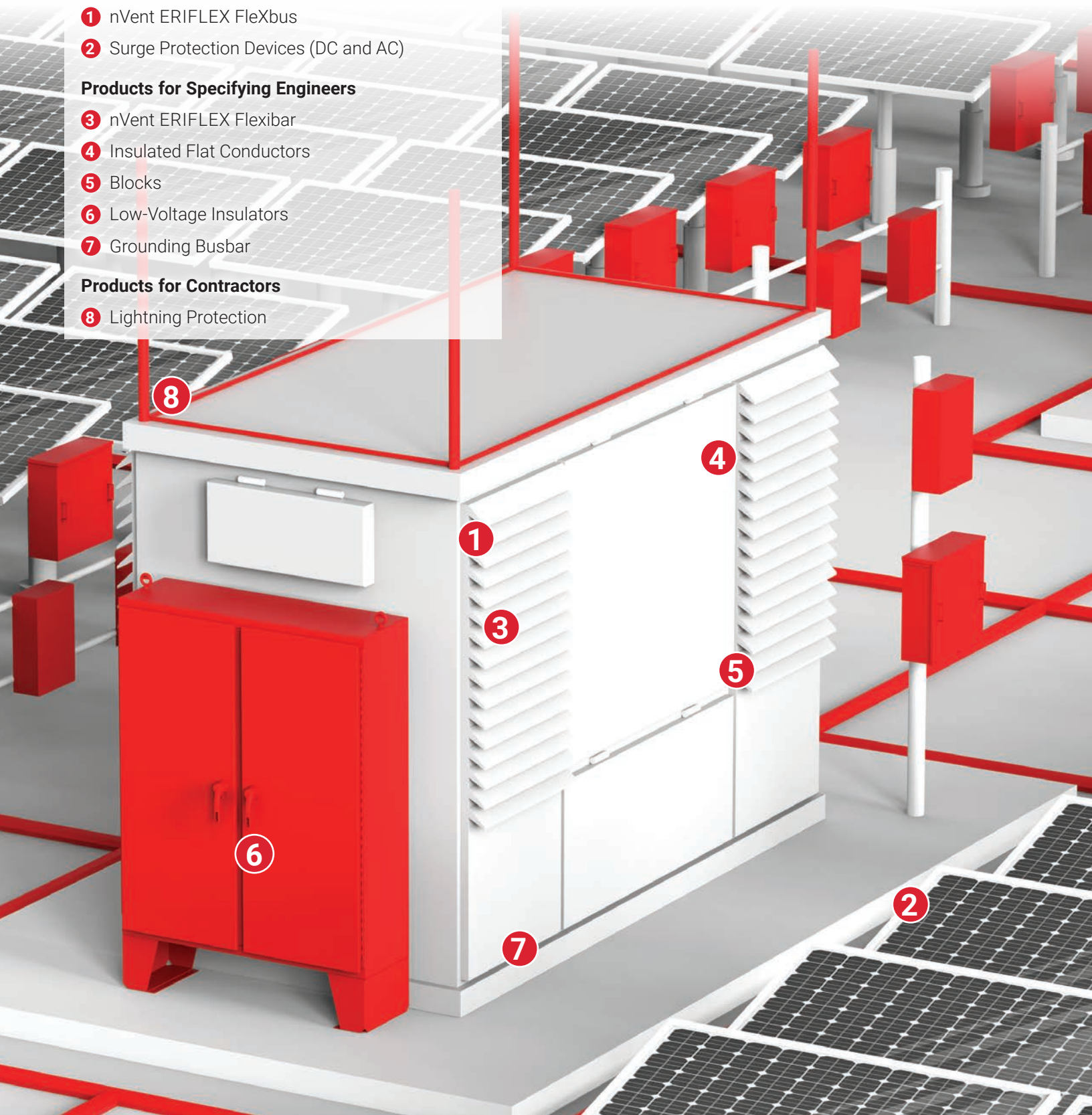
- 1 nVent ERIFLEX Flexbus
- 2 Surge Protection Devices (DC and AC)

## Products for Specifying Engineers

- 3 nVent ERIFLEX Flexibar
- 4 Insulated Flat Conductors
- 5 Blocks
- 6 Low-Voltage Insulators
- 7 Grounding Busbar

## Products for Contractors

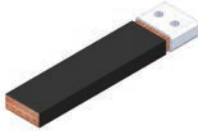
- 8 Lightning Protection





# Inverter and String Inverters

## Products for Contractors and Specifying Engineers



### nVent ERIFLEX FlexBus

In applications including solar inverter boxes, the nVent ERIFLEX FlexBus System provides a patented connection solution between two pieces of electrical equipment. This unique concept provides faster installation and reduces total installation cost without additional design study, a specialized workforce or expensive tools.



### Surge Protection Devices (DC)

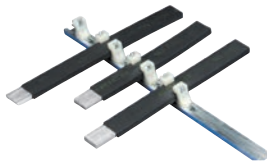
The nVent ERICO TDS50 series of surge protective devices provides economical and reliable protection from voltage transients on solar PV systems. The series consists of models specifically designed for 24 to 1,000 DC voltage systems that are easy to install in combiner boxes or inverters.



### Surge Protection Devices (AC)

By using Transient Discriminating (TD) technology, the nVent ERICO TDX Compact Series provides long life, even under the most adverse, over-voltage condition. With maximum surge ratings of 50 kA or 100 kA 8/20  $\mu$ s (depending on the model), protection is suitable for sub-distribution panels.

## Products for Specifying Engineers



### nVent ERIFLEX Flexibar

nVent ERIFLEX Flexibar Advanced supports secure Flexibar without damaging the insulation and ensure correct spacing for optimum cooling. Find options for supporting up to eight conductors in parallel or creating up to three 25.6 inches (650 mm) supports capable of holding four nVent ERIFLEX Flexibar.



### Customized Solution nVent ERIFLEX Flexibar

Tap into custom engineering solutions for your next solar energy project. Our deep industry expertise and years of experience can save you a significant amount of R&D spending and time. As a global organization, we are experienced with regional codes, standards and practices, including OEM specs for solar power installations.



### Insulated Flat Conductors

IBS/IBSB Advanced Insulated Braided Conductor from nVent is the ideal ready-to-install, flexible wire replacement solution. It is specifically designed for connections to all molded case circuit breakers, including the most compact breakers, without any additional accessories such as connectors, spreaders or extenders.



### Blocks

nVent ERIFLEX single-pole distribution blocks easily clip onto DIN rail or mount to panels with screws and are compliant with IEC 60947-7-1 and UL 1059. Two- and four-pole distribution blocks also provide an easy connection with solid bars for greater reliability. Find power blocks and splice blocks as well for making reliable connections.

See more products on [page 12](#).

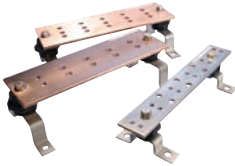
# Inverter and String Inverters

## Products for Specifying Engineers



### Low-voltage Insulators

nVent ERIFLEX low-voltage insulators are made from a halogen-free unsaturated polyamide reinforced with 30% minimum glass fiber. The insulators meet UL 94 V0 requirements for self-extinguishing materials and work in temperatures from -40°F to 266°F (-40°C to 130°C).



### Grounding Busbar

We can design and manufacture custom bars to meet specific application requirements. nVent ERICO brand of equipment bus bars are UL 467 Listed. Grounding conductors can be welded to the bar using the Cadweld process or are terminated using lugs.

## Products for Contractors



### Lightning Protection

nVent ERICO manufactures lightning protection systems in full accordance with 12 major industry standards, including systems based on optimized air terminals and placement as well as isolated conductor systems. Reliable protection of property and personnel demands a comprehensive approach to minimizing threats.



# nVent ERIFLEX Customized and Engineered Solutions



nVent ERIFLEX offers the necessary products and engineering support needed to specify and build a complete range of solutions for energy, transportation, construction and applications where low voltage power storage and transmission are critical. Our engineering team brings years of experience and expertise to every project, and will be with you from start to finish to advise on:



**Standardized and customized product solutions**



**Global standards compliance**



**Engineering and prototype installation support**



**Post-installation support**

## DESIGN FLEXIBILITY, IDEATION AND PROTOTYPING

Work with the nVent team to build a customized, compact low voltage power distribution panel solution that is safe, reliable, enables design flexibility and lowers the cost of implementation.



Have a need or requirement for an application? Submit a request and we will collaborate with your engineering team to find the best solution.



The team will collaborate from design concept to prototype to ensure the final design is able to be manufactured.



Once the design is finalized, the sales team will work with supply chain to ensure we meet the forecasted demands.

## SUPPORTING CUSTOMERS FROM DESIGN TO MANUFACTURING TO ONGOING MAINTENANCE

nVent ERIFLEX offers worldwide, high-volume manufacturing of these customized product solutions, with local warehouse stocking in your region. Not only will the team help with engineering and ordering, but will also remain on the project through installation and ongoing maintenance.

For upfront and ongoing training on nVent ERIFLEX, our team offers lunch and learns, engineering webinars and virtual presentations regarding nVent product offerings and benefits. In addition, our technical team can be on-site to perform application specific training.

# Resources and Services



Find more resources for understanding solar power infrastructure electrical and fastening requirements at [nVent.com](https://www.nVent.com).



## Interactive Virtual World

See nVent products in action by using our interactive customer maps.



Utility Virtual World



nVent Virtual World



## Training

nVent Training Center virtual access allowing your teams to learn the complete nVent brand portfolio at their convenience.



Browse the Catalog





### nVent Design Support

Our dedicated service teams know how to tackle solar power technical and production challenges. From design assistance to training and support anywhere in the world, we can assist you at critical project stages when planning for lightning and surge protection, panel security or how to get new projects built on time and budget.

If you need engineering support or high-volume manufacturing of customized solutions, nVent can provide support leveraging proven products that meet strict standards for quality and performance.

[Contact Us Today](#)



### Resources

View more about the nVent Solar product offering on [nVent.com](#).

Follow nVent Electrical Connections on social media to stay up-to-date on new products and more.



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