

SOLAR POWER SOLUTIONS

From solar farms to commercial rooftop applications, Werner Electric serves all solar applications with the latest products, services, and technical expertise.

- Wire And Cable
- Modules, Inverters, and Racking
- Distribution Equipment
- Balance of System
- Physical Support Products
- Cable Management
- Value-Added Services



WIRE and CABLE



Photovoltaic Wire – Panel Interconnect Wire

- Copper conductor
- XLPE insulation
- Type PV Listed, UL 4703: 600 V, RW90, 1 kV or 2 kV
- 1 kV RWU90, CSA c22.2 No. 38-05
- Photovoltaic cable CSA, C 27.2, No. 271 (2011)



CABLE 15 kV 133% or 100% Insulation Level Power Cable

- Copper or aluminum conductor
- CSA 68.3 (68.5) future
- Copper tape shield
- TR-XLPE insulation
- Conduit or underground duct
- PVC jacket direct burial applications
- FT-1 90°C



Aluminum Wire

- Aluminum conductor
- XLPE insulation
- Type PV Listed, UL 4703: 600V, RW90, 1kV or 2kV
- 1kV RWU90, CSA c22.2 No.38-05
- Photovoltaic cable CSA, C 27.2, No. 271 (2011)
- Colors available



Ground Wire

- Meets ASTM specifications
- Soft-drawn bare copper Class B3
- Solid or stranded



15 kV or 35 kV Concentric Neutral Power Cable

- Aluminum or copper conductor
- CSA C 68.3 (68.5) future
- TRXLP insulation
- Copper wire metallic shield
- Polyethylene jacket or PVC
- Direct burial applications
- FT-1 90°C WIRE



Communications and Control Cables

- Fiber optic or copper cable
- Multiconductor or paired
- Multiple shielding options
- For instrumentation, metering, and control applications

WIRE and CABLE



Cable-In Conduit

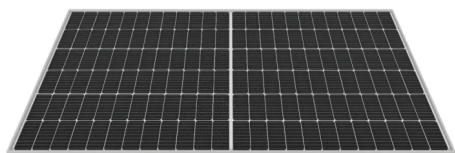
- Increases job safety, productivity, and profitability and can be customized to meet specific needs
- One-step installation saves time, money, and equipment costs
- Conduit protects cable from damage due to installation, transit, weather, and rodents
- Increased flexibility eliminates low-temperature breakage
- Lower replacement costs, reduced outage time, reduced property damage, and allowance of cable upgrade



HDPE

- Superior corrosion and chemical resistance, flexibility, and durability
- Available in various sizes, colors, dimensions, and lengths to meet diverse project needs
- Available in long reel lengths that minimize joints and installation time
- Conforms to ASTM requirements, UL651A and NEMA TC-7

MODULES, INVERTERS, and RACKING



Modules

- Features the latest high-efficiency cells, including TOPCon and HJT
- Delivers exceptional performance with wattage options exceeding 700W



Inverters

- 1500 VDC
- Multiple output voltage options (480–800 VAC)



Racking

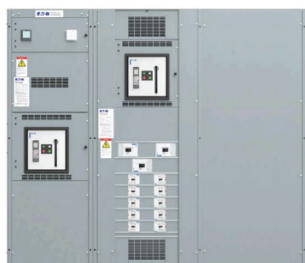
- Ground mount options include fixed tilt- and single-axis trackers
- Ballasted roof mount systems offer multiple tilt angles for both grid-style and bay-style racking solutions

DISTRIBUTION EQUIPMENT



Transformers

- Designed for the renewable energy industry, where voltage adjustments are required for solar generation and the utility service
- Available in a broad range of applications and environments, and provides a high level of safety and reliability



Switchgear

- Reliable, scalable, and efficient solutions for solar requirements
- Able to handle harsh environments with consistent performance
- Control capabilities to handle remote monitor, SCADA, and load management integration
- Seamless grid interaction that supports grid stability



Load Break Enclosures and Disconnects

- Up to 1500V



Combiner Boxes

- Used to combine PV cables from several solar arrays
- PV cables are fed through fuses to produce a single output that is then fed to the inverter
- Used for both commercial rooftop and solar farm applications
- Up to 1500 VDC
- Input circuits: up to 36 circuits
- UL 1741 standard NEMA 3R, 4, or 4X
- Fiberglass, steel, or aluminum options
- 400A or 600A disconnects
- Integral disconnect: with or without switch
- Mechanical lugs or option for compression lugs
- Single polarity or dual polarity



Sectionalized Cabinets

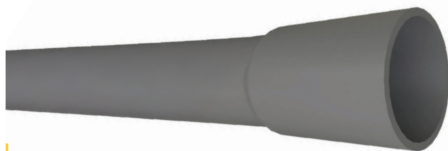
- Lightweight, durably constructed fiberglass
- Manufactured with spray-up/lay-up process
- Available in multiple sizes and designs for 15, 25 and 35KV applications

BALANCE OF SYSTEM



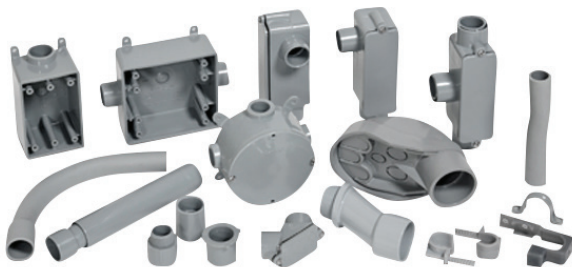
Junction Boxes

- Standard sizes up to 16" x 16"
- Custom options available for larger sizes



PVC

- Nonmetallic PVC material which is corrosion, rust, and sunlight resistant
- ETL listed
- Conforms to UL651 and NEMA TC-2
- Rated for use with 90°C conductors
- Made in USA
- Sunlight resistant
- 10' and 20' lengths available



Fittings/Elbows

- Fittings from 1/2" diameter up to 6"



PV Connectors

- Used to connect the end of each array of panels to the PV wire that runs back to the combiner box
- Available as in-line fuses or in all major brands
- **Note:** Not all PV connectors mate together (knowledge of which manufacturer's connector at the end of the array of panels is essential)

Grounding

- Copper ground rods
- Mechanical and compression grounding connectors
- Flexible braid
- Lightning arrestors
- Exothermic grounding



Terminations

MV Terminations

- 5KV-46KV
MV Terminations
- Load break
- Dead break elbows
- Surge arrestors



Power Connectors

- Copper and aluminum compression connectors are used for terminating medium and large AWG size cables in electrical applications
- Compression-type lugs
- Compression barrel splices
- Mechanical lugs and splices



PHYSICAL SUPPORT PRODUCTS and CABLE MANAGEMENT

Physical Support Products

Cable Tray

- Support and route cable

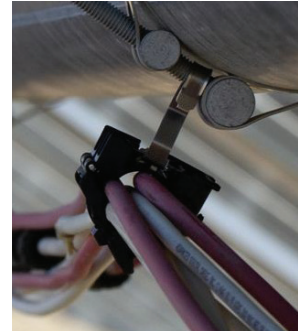
Roof Blocks

- Used for rooftop applications



Cable Management

- Solar cable ties
- Solar edge clips and clamps
- Protective tubing
- Cable rings and saddles



VALUE-ADDED SERVICES

Takeoff Services

Werner Electric Supply provides comprehensive support to electrical developers and contractors for utility-scale solar projects.

Our services include

- Detailed product take-offs from drawings
- Development of a full Bill of Materials (BOM) tailored to project specifications
- Expert solar design assistance to optimize layouts and enhance efficiency

With a focus on precision, customization, and resource optimization, we streamline project execution and help achieve superior results.



Jobsite Coordination

Werner Electric Supply's service includes scheduling, communication, resource management, and problem-solving to keep projects on track and within budget. Utilize our jobsite coordination service to streamline workflows, reduce waste, improve safety, and enhance communication.

Custom Assembled Kits

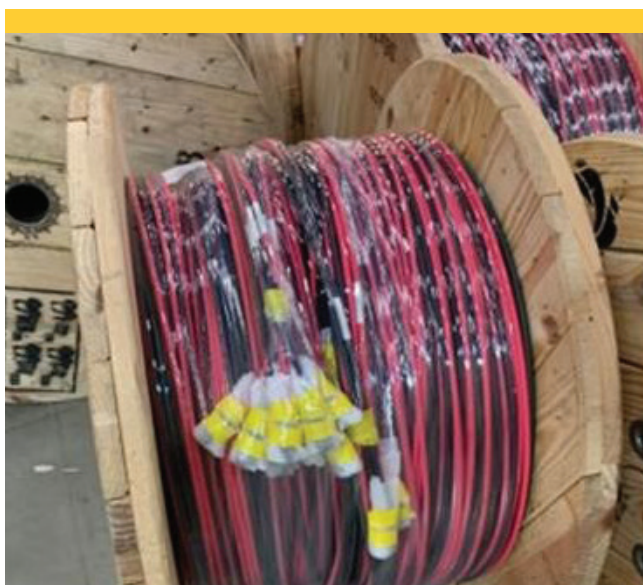
Werner Electric Supply can kit common products together, making them easier to handle and find on the job site.

- Kits can reduce the number of separate packages that need to be opened as well as minimize the amount of waste
- Kits could contain products such as one 12-string combiner box with 12 fuses, 12 female solar connectors, 12 male solar connectors, UV-resistant cable ties and edge clips, grounding connectors, and a 1,000-ft. spool of PV cable

VALUE-ADDED SERVICES

Custom Assembly Services

Werner Electric Supply offers a variety of custom assembly and prefab services designed to save time and labor on job sites by providing pre-assembled components that are ready for installation. From conduit bending to wire stripping, all our services will optimize job site productivity.



PV Wire Harnesses, Jumpers and Pigtails

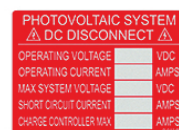
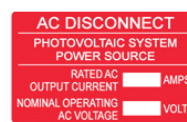
Installing solar connectors in the field can be timely and expensive. Werner Electric Supply can supply custom PV wire harnesses, jumpers, and pigtails for a plug and play installation setup.

- PV harnesses can be used to put multiple strings in parallel, eliminating the need to run a positive and negative from each string back to the combiner box
- Jumpers can be used to connect the end of an array to a parallel wiring assembly
- Pigtails are useful in wiring the end panel of an array to the combiner box



Custom Cut and Labeled Reels

Werner Electric Supply will cut connector and power cables to specified lengths as well as tag and deliver to job sites. Cut-to-length reels reduce scrap, on-site cutting, storage, theft, damage, and labor costs.



Wire Identification and Labels

- Complete solutions for all PV equipment labels with critical safety messages and maintenance instructions — in addition to a variety of cable and wire identification printers and premade labels.
- Werner Electric Supply can provide customized labels on the fly through our complete, in-house engraving facility.



Contact us today to
learn more about how
we can support your
solar energy goals.

WernerElectric.com
866-4-WERNER

