





PANDUIT VALUE PROPOSITION

Panduit’s broad portfolio offers 75 percent of a typical Electrical Balance of System (BOS) bill of materials, which covers more ground than any other manufacturer. Combine this with direct access to expert consultants and strategic R&D investments that maximize efficiencies and decrease the total cost of ownership across the entire project.

- **Reduce Installation Time** – Panduit solutions are known for patented, time-saving features that reduce the required number of installation steps
 - **Longer Operating Life** – Panduit solutions for the solar industry are rated for UV compatibility; the combination of our engineering and manufacturing expertise results in products that deliver optimized product life spans
- **Harsh Environment Applications** – Panduit conducts extensive testing to ensure product performance and under conditions that include high wind, high vibration, intense UV exposure, extreme temperatures, and corrosive atmospheres.
 - **The Value of Partnership** – With Panduit as a partner, companies have the confidence of knowing that an entire team of knowledgeable professionals is available to provide a complete solution

CUSTOMERS

TARGET AUDIENCE	LEADING QUESTIONS	CUSTOMER CHALLENGES	BENEFITS
EPC/Contractor Construction / Project Manager	 What safety standards are applicable to your solar farm project?	<ul style="list-style-type: none">• Project constraints: Time is Money—reduced timelines, productivity, fewer resources, tighter budgets• Workforce training & Safety• Product availability• Product reliability• Ease of Installation	<ul style="list-style-type: none">• Tooling and Kitting; the right product at the right time.• Tech Support and Panduit Certified Installer training program• Stock at distribution• Ongoing R&D• Documented reliability – 25 years of operating life
Engineer/Consultant Specification / Design Engineer	 Who is designing and constructing your solar farm? Are you using outside contractors?	<ul style="list-style-type: none">• Minimize project cost & meet project specs• Adapt vendor-specific codes to local standards• Performance & Reliability• Standards	<ul style="list-style-type: none">• Tooling solutions: lowest installed cost due to savings in material and labour• Quantifying solution impact on project• Expertise in standards applicability
OEM Combiner Boxes / Disconnect Boxes / Inverters	 Who is supplying the panels? Are they also providing combiners and inverters?	<ul style="list-style-type: none">• Maximize energy output (KW /panel)• Increase productivity (# of panels / year)• Minimize operational maintenance	<ul style="list-style-type: none">• Part # consolidation – Kitting or bundling products specific to wire management, grounding• Engineering advantage solutions with respect to specific products – nylon 12 cable ties, or plastic and metal edge clips• Superior tool design and training
End User/Owner i.e. Utility Company, Microsoft, Facebook	 What is the size and scope of your project? <i>small <10MW</i> <i>medium >10MW but <100MW</i> <i>large >100MW</i>	<ul style="list-style-type: none">• Lowest cost of ownership• Regular maintenance / MRO• Uptime / Operating life• Product testing for product reliability, longevity, and overall quality	<ul style="list-style-type: none">• Lowers total installed cost• Regional Representation• Warranty Program• Beyond the Balance of System (BOS): Panduit's stewardship of green initiatives

PANDUIT®



Solar Solutions

OVERVIEW

As the solar industry has matured, solar-derived power has evolved beyond a scattering of simple panels to complex assemblies of solar conversion devices, control systems, and transmission stations. Solar power technology has advanced impressively while also becoming less expensive. Getting PV panels installed is a perfect way to generate electricity without negatively impacting the environment. Solar energy equipment, whether for a utility-scale application of solar energy, commercial or residential, requires you to consider various components to produce a quality system that will last for the 25+ years that customers are expecting.

MARKET TRENDS

Heliovolta releases an annual report on solar performance and safety called the SolarGrade PV Health Report, which uncovered that 59% of all issues are field-made connectors and wire management. Installer error is typically the root cause for these categories of issue, highlighting the value of reliable and easy to install solutions.

- Renewable energy accounted for 22% of US generation in 2022 and is expected to gain two to five percentage points per year, reaching nearly 50% by 2030.
- More and more, Solar PV installations are being paired with Battery Storage, a balancing act that helps to create a more flexible and reliable grid system when there is more supply than demand
- Deloitte’s, analysis indicated that by 2030, the Largest US electric companies could collectively spend upwards of \$1.8 trillion to strengthen and decarbonize the grid.
- Balance of System (BOS) will play a larger role in increasing the performance and minimizing the cost of utility-scale PV installations

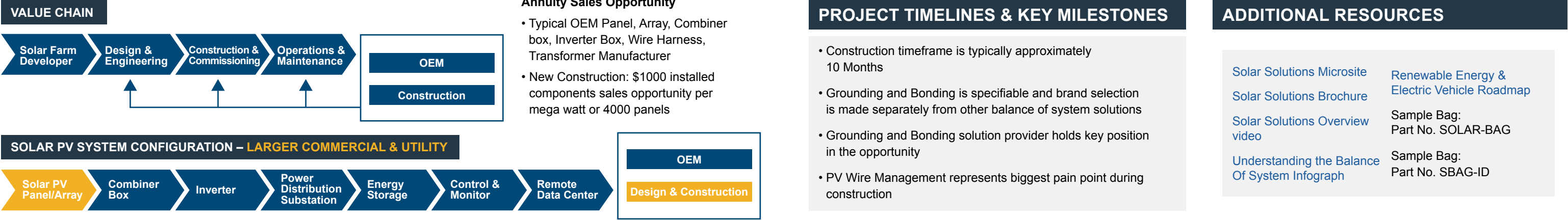
ADDITIONAL SALES OPPORTUNITY

- Solar farms, along with being a power generation utility are also a Network Infrastructure end user. They will have network needs typical of enterprise networks and data centers. As such, they will automatically be users of the entire range of Panduit network infrastructure products such as fiber optic and copper connectors, cables, pathways, racks, cable management systems and cabinets.
- Energy Storage plays an important role in the balancing act and helps to create a more flexible and reliable grid system when there is more supply than demand. This presents an opportunity to sell Panduit’s electrical and network solutions.

FAST FACT

Panduit solutions cover up to 75% of a typical PV installation electrical BOS.
www.panduit.com/solar





SOLUTIONS MATRIX								PANDUIT®							
GROUNDING CONNECTOR SOLUTIONS								IDENTIFICATION SOLUTIONS							
CTAPR Series Grounding Connector	•	•	•	•				PXE™ MP300 Mobile Printer	•		•	•	•	•	•
Mechanical Connector Split Bolts	•			•				TDP43ME Desktop Printer	•		•	•	•	•	•
Service Post	•			•				Arc Flash Labels	•		•	•	•	•	•
Grounding & Fence Clamps	•			•				Self-Laminating Wire Markers	•		•	•	•		•
CT-2980/STBT	•	•	•	•				Continuous Tape	•		•	•	•		•
CT-2931/STBT	•	•	•	•				Heat Shrink	•	•	•				
POWER CONNECTOR SOLUTIONS								SAFETY SOLUTIONS							
Aluminum & Copper Lugs		•	•	•			•	Pre-Printed Solar Labels	•	•	•	•	•		
Aluminum Splice		•	•	•			•	Detectable Tape		•	•	•		•	•
Braided Bonding Straps								Electrical Tape		•	•				
Lay-In Lugs	•	•					•	Lockout Padlocks		•	•	•		•	•
Aluminum Mechanical Lugs		•		•			•	Barricade Tape		•	•	•		•	•
Ring Terminals		•	•				•	Nylon Marker Plates	•	•	•	•	•	•	•
Fork Terminals		•	•				•	Safety Tags	•	•	•	•	•	•	•
CT2300/ST Series		•	•				•	VeriSafe™ Absence of Voltage Tester		•	•	•	•		
CT-1550 Crimp Tool		•	•				•	Data Access Port					•		
CD-550 Die Insert		•	•				•	NETWORK COMMUNICATION SOLUTIONS							
CABLE MANAGEMENT SOLUTIONS								Category 6 Copper Cables Shielded						•	•
Edge Clip with Cable Tie Mounts	•		•				•	Category 6 Copper Cables Unshielded						•	•
Metal Solar Edge Clip			•				•	TX6™ Shielded Field Term RJ45 Plug						•	•
Plastic Solar Edge Clip	•		•				•	Category 6 Din-Rail Adapter						•	•
GTS-E	•	•	•				•	Category 6 Din-Rail Panel						•	•
GTH-E	•	•	•				•	TX6000™ Category 6 Shielded Solution Horizontal Jack						•	•
Weather Resistant Nylon 612 Cable Ties	•	•	•		•		•	TX6A™ Shielded Solution Horizontal Cable						•	•
Weather Resistant Nylon 12 Cable Ties	•	•	•		•		•	TX6A™ Category 6A Shielded MUD Resistant Solution Non-Armored						•	•
Weather Resistant Nylon 6.6 Cable Ties	•	•	•		•		•	TX6A™ Category 6A Shielded MUD Resistant Solution Armored						•	•
StrongHold Fully Coated Stainless Cable Ties	•	•	•		•		•	TX6A™ Category 6A Shielded MUD Resistant Solution Jack						•	•
UV Rated CLT	•	•	•				•	Fiber Connectivity Solutions						•	•
MLT Double Loop Cable Cleat Configuration						•	•	Jack Module Block-out Device						•	•
Polymer Trefoil Cable Cleat Configuration						•	•	RJ45 Plug Lock-in Device						•	•
Polymer Cable Cleat One-Hole Configuration						•	•	LC Duplex Adapter Block Out Device						•	•
Polymer Cable Cleat Two-Hole Configuration						•	•	SmartKeeper RJ45 Blockout Device						•	•
SS Solar Wire Hanger	•							SmartKeeper USB Type A Blockout Device						•	•
								SmartKeeper USB Type C Blockout Device						•	•
								SmartKeeper Master Key						•	•