## 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

<table>
<thead>
<tr>
<th>TARGET AUDIENCE</th>
<th>LEADING QUESTIONS</th>
<th>CUSTOMER CHALLENGES</th>
<th>BENEFITS</th>
</tr>
</thead>
</table>
| EPC/Contractor  | What safety standards are applicable to your solar farm project? | • Project constraints: Time is Money—reduced timelines, productivity, fewer resources, tighter budgets  
• Workforce training & Safety  
• Product availability  
• Product reliability  
• Ease of Installation | • 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 | Who is designing and constructing your solar farm? Are you using outside contractors? | • Minimize project cost & meet project specs  
• Adapt vendor-specific codes to local standards  
• Performance & Reliability  
• Standards | • Tooling solutions: lowest installed cost due to savings in material and labour  
• Quantifying solution impact on project  
• Expertise in standards applicability |
| OEM | Who is supplying the panels? Are they also providing combiners and inverters? | • Maximize energy output (KW/panel)  
• Increase productivity (Kwh of panels/year)  
• Minimize operational maintenance | • 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 | What is the size and scope of your project? (small: <10MW  
medium: 10-100MW  
large: >100MW) | • Lowest cost of ownership  
• Regular maintenance / MRO  
• Uptime / Operating life  
• Product testing for product reliability, longevity, and overall quality | • Lowers total installed cost  
• Regional Representation  
• Warranty Program  
• Beyond the Balance of System (BOS): Panduit’s stewardship of green initiatives |

### 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 reliable and easy to install solutions.

### MARKET TRENDS

Hayes Research releases an annual report on solar performance and safety called the SolarGrade PV Health Report, which uncovered that 50% 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.

### 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.
### Solutions Matrix

#### Grounding Connector Solutions
- **CTAPR Series Grounding Connector**
- **Mechanical Connector Split Bolts**
- **Service Post**
- **Grounding & Fence Clamps**
- **CT-2980/STBT**
- **CT-2931/STBT**

#### Power Connector Solutions
- **Aluminum & Copper Lugs**
- **Aluminum Splice**
- **Braded Bonding Straps**
- **Lay-In Lugs**
- **Aluminum Mechanical Lugs**
- **Ring Terminals**
- **Fork Terminals**
- **CT2300/ST Series**
- **CT-1550 Crimp Tool**
- **CD-550 Die Insert**

#### Cable Management Solutions
- **Edge Clip with Cable Tie Mounts**
- **Metal Solar Edge Clip**
- **Plastic Solar Edge Clip**
- **GTS-E**
- **GTH-E**
- **Weather Resistant Nylon 612 Cable Ties**
- **Weather Resistant Nylon 12 Cable Ties**
- **Weather Resistant Nylon 6.6 Cable Ties**
- **Steel Hose Fully Coated Stainless Cable Ties**
- **UV Rated CLT**
- **MLT Double Loop Cable Cleat Configuration**
- **Polymer Triefol Cable Cleat Configuration**
- **Polymer Cable Cleat One-Hole Configuration**
- **Polymer Cable Cleat Two-Hole Configuration**
- **SS Solar Wire Hanger**

### Identification Solutions
- **PXE™ MP300 Mobile Printer**
- **TDP43ME Desktop Printer**
- **Arc Flash Labels**
- **Self-Laminating Wire Markers**
- **Continuous Tape**
- **Heat Shrink**

### Safety Solutions
- **Pre-Printed Solar Labels**
- **Detectable Tape**
- **Electrical Tape**
- **Lockout Padlocks**
- **Barricade Tape**
- **Nylon Marker Plates**
- **Safety Tags**
- **VerifySafe™ Absence of Voltage Tester**
- **Break-Apart Key**

### Network Communication Solutions
- **Category 6 Copper Cables Shielded**
- **Category 6 Copper Cables Unshielded**
- **TX6™ Shielded Field Term RJ45**
- **PIA™ Category 6 Shielded Solution Horizontal Jack**
- **TX6A™ Shielded Solution Horizontal Cable**
- **TX6A™ Category 5A Shielded MUD Resistant Solution Non-Armored**
- **TX6A™ Category 5A Shielded MUD Resistant Solution Armored**
- **TX6A™ Category 6 Shielded MUD Resistant Solution Jack**

### Additional Resources
- **Solar Solutions Microsite**
- **Solar Solutions Brochure**
- **Sample Bag**
- **Solar Solutions Overview**
- **Understanding the Balance Of System Infograph**

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**www.panduit.com/solar**

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