Innovative Solar Solutions
Reliable, flexible and efficient interconnection solutions
HEYCO® SUNWRAP™ - POLYETHYLENE
Absorbs vibration, insulates cables, and resists abrasion
Multiple size bundles from .125” (3,2 mm) to 7” (177,8 mm) diameters
Available in UV black or natural color

HEYCLIP™ SUNRUNNER® CABLE CLIP & SUNRUNNER® 90°
Robust “double-compression” design accommodates up to (2) 10 gauge PV-1000V wires
Smooth clip edges prevent damage to cable insulation
Locking tabs securely fasten clips to module extrusions, or other panels
Generous lead in for installation without tools, screwdriver slot for easy removal

HEYCO® SUNBUNDLER® STAINLESS STEEL CABLE TIES
Extremely durable, vinyl jacketed Aircraft Grade Stainless Steel Cable Tie
Smooth vinyl jacketing prevents damage to cable insulation
Stainless steel crimp sleeve for easy field installation with linesman pliers, or wire cutters
UV protected vinyl jacket is excellent for solar installation

HEYCO GROUNDING SOLUTIONS
Copper LugRunner: accommodates 4-12 awg wire, UL/CSA approved for direct burial
Suitable for both indoor and outdoor use
SunJumpers: 6 AWG tinned copper braided wire, .250” mounting hole diameter at both ends, terminals accept a #10 screw.
Sunstars: Stainless steel design creates bond between PV module and racking system
UL Recognized to UL Standard 2703, Extrusions symmetrically opposed for maximum strength

HEYCO® SUNSCREENER® WIRE MESH CLIP & HEYCO® SUNSCREEN™ WIRE MESH
Protects solar panels and wires from rodents and nesting birds
Constructed from 303/304 Stainless Steel for maximum endurance to outdoor elements
Stainless Steel J-hook attaches to the panel frames and the washer holds the Sunscreen to the module

HEYCO®-TITE SOLAR MASTHEAD® II LIQUID TIGHT CORDGRIPS
Break-Thru Skinned-Over glands offers a liquid tight seal around the wires
IP 68 Rated
Designed for use with 12 and 10 AWG USE-2 or 1000V PV wire
Multiple sizes and configurations available

HEYCLIP™ MAXRUNNER® CABLE CLIP ARRAY
Available in Clip or Screw Mount
Holds up to 12 cables with diameters ranging from .20˝ (5,2 mm) to .28˝ (7,2 mm)
Constructed from PPE+PS flame retardant “Noryl” material

HEYCO-FLEX III LIQUID TIGHT TUBING
UV rated corrugated tubing for trade sizes 3/8” through 1”
Rated for NEMA 4 and 4x applications when used with Heyco-Flex III Liquid Tight Fittings
Maximum flexibility for extremely tight quarters
COMBINER BOXES FOR DC
Custom Engineered Solutions
Perfect for utility and large commercial projects
8~48 Strings, 1000 V DC
ETL, UL, CSA agency approvals

SURGE (OVERVOLTAGE) PROTECTION
Pluggable varistors
Rated up to 1000 VDC
With alarm contacts
UL 1449 3rd Edition

FUSE HOLDERS & TERMINALS
1000V rated up to 20 A
With and without LED versions
-50°C to 120°C operating temp
Pivoting retainers

WIRELESS COMMUNICATIONS
For monitoring and control
Meshing (self-healing) networks
900Mhz, 2.4Ghz, & 5.8Ghz bands
Ethernet and direct I/O connections

POWER SUPPLIES
For current monitoring and network devices
0.5A ~ 40 A, single and 3-phase units
UL and CSA agency approvals
Capacitor and Diode (redundancy) modules

INDUSTRIAL ETHERNET
Managed and unmanaged switches
Media Converters (fiber and serial)
Gigabit Routers with 3G/UMTS communication
Field installable RJ45 connectors

PRECISION TOOLS & FERRULES
Wide range of UL listed ferrules
Industrial grade cutters, strippers & crimpers
Single tool for cutting and stripping solar cables
Full range of 1000V rated hand tools
ABRASION PROTECTION
Economical/easy way to insulate, protect, bundle and color-code components and cables
Available in a wide variety of sizes, for indoor and outdoor applications
Designed to endure harsh conditions, including UV exposure
UL recognized

MECHANICAL POWER AND GROUNDING CONNECTORS
Designed to accept a wide range of wire gauges
Functional product information is clearly marked on each connector
High strength, high conductivity electrolytic alloys provide optimum connectivity in power and grounding applications
UL Listed and CSA Certified for use up to 600V and UL temperature rated to 90°C

BRAIDED BONDING STRAPS
Made of high conductivity copper and tin-plated to inhibit corrosion
Seamless ferrule ends provide mechanical strength for improved reliability
UL 467 Listed and CSA Certified
# 4 awg copper conductor size, with 3/8” stud hole size

IDENTIFICATION AND SAFETY
Panduit identification solutions include solar labels, wire/cable marking, Safety identification, warning labels, Electrical hazard labels and much more
Pre-printed and Print on Demand solar rating labels and Identification labels available
Endure harsh conditions, including the UV exposure in PV applications
Meets NEC/IFC standards – 2011 & 2014

GROUNDING CONNECTORS
Part of a complete offering for power and grounding applications in harsh environments
Allows for quick installation
Available in Aluminum or Copper with corrosion-resistant tin plating and stainless steel screws
UL 486A-486B and UL 467 Listed

POWER CONNECTORS
Easy wire entry (beveled entry ports)
Inspection windows (ensure proper wire depth)
Compression lugs offered in copper and aluminum conductor sizes #14 AWG- 1000 Kcmil
UL Listed and CSA Certified to assure high quality, reliable crimps

TOOLS
High quality Reliable crimping, bundling, cutting tools
Ergonomically designed to minimize operator effort
Provides speed in installation and maximizes productivity
Reduces the risk of downtime with quality tools

UV CABLE TIES AND CLIPS
Panduit offers a full range of weather resistant cable ties and clips in various materials including Nylon 6.6, Nylon 12, Polypropylene, and Acetal
These materials provide greater resistance to damage caused by ultraviolet light
UTL – UL/IEC POWER & SIGNAL PLASTIC CONNECTOR
Power: 600V AC/DC and 16A (Rated by UL & VDE)
Signal: Compatible with RS-485
Quick installation with unique Push-Pull thumb latch connection
Extreme Outdoor and Waterproof sealing: IP68/69K mated & unmated
UV resistant (F1 rating per UL746C)
Corrosion immune: Salt spray: ≥1000H
Safe disconnect under power load

CLIPPER – VERSATILE, RUGGED & WATERPROOF PLASTIC CONNECTOR
Affordable Plastic Connector with ½ turn connection
Extreme Outdoor and Waterproof sealing: IP68/69K mated & unmated
Size 16 AWG Contact w/crimp barrel which can accept 12 AWG wire
UV Resistant and UL/IEC Compliant

UTS – INDOOR/OUTDOOR WATERPROOF PLASTIC CONNECTOR
Popular Plastic Connector with Rapid 1/3 turn connection
Extreme Outdoor and Waterproof sealing: Dynamic IP68/69K mated & unmated
UV Resistant and UL/IEC Compliant
Now available with secondary lock feature, requires screw driver to un-mate connectors

UTO – ROBUST METAL & SHIELDED CONNECTOR
Shielded Metal Connector with Rapid 1/3 turn connection
Extreme Outdoor and Waterproof sealing: Dynamic IP68/69K
UL Compliant
Corrosion & Salt Spray Resistant

FLEXIBLE CONDUIT FITTINGS FOR UTS & UTO PLUGS
Combination of easy-to-use and reliable solution for discrete wire protection
Waterproof IP67/IP68/IP69K & UV resistant making it ideal for outdoor applications
Compatible with market standard and designed for NW conduit profile
Ergonomic design Easy handling
Conduit locking mechanism making it easy to install
Halogen free Environmentally friendly
SPECIAL MATERIAL CABLE TIES
Specially designed for the solar industry
HellermannTyton offers a wide range of cable ties that are made of UV stabilized materials
Available materials: PA66UV, PA66HIRHSUV, PA11, PA12, Acetal, and Stainless Steel

EDGE CLIP AND UV STABILIZED CABLE TIE ASSEMBLIES
Edge Clips secure cables to available frame or PV module edge
Available in 1-3mm or 3-6mm sizes
Eliminates the need for pre-drilled holes
Multiple bundle widths with parallel or perpendicular orientations are available
Edge clips secure easily but have high extraction force

C-CLIPS
Designed for use on frames with pre drilled .2-.28 mm mounting holes
Unique Fir Tree mount provides low insertion force and high extraction force
Holds one PV cable
Manufactured of impact modified polyamide 6.6 material

TT230SMC PRINTER
300dpi thermal transfer printer is ideal for small to medium volume applications
Ethernet ready with integral cutter for use with continuous vinyl label rolls
Print speeds up to 3” per second
Easy set up and loading without adjustment

CONTINUOUS VINYL LABELS
Available in white, yellow, orange, red and black in 1” and 2” widths
Reflective continuous Red vinyl available to conform to NEC requirements
UL969 Certified
Allows user to print labels “on demand” and cut to size

PREPRINTED LABELS
Meets the requirements of UL 969 and are compliant to NEC 2014
Special adhesive for use on both enamel and powder coat paint surfaces
Offering includes warning, caution, rating, signal, panel, raceway, combiner, inverter, and disconnect labels

SAFETY LABELS
UL969 certified
A line of the most commonly used regulatory sign colors in various formats
UV stable white Polyester with clear polyester laminate

TAGPRINT® XPRESS SOLAR MOBILE APP
Prints NEC 2014 labels wirelessly
NEC code reference tool helps ensure passed inspections
Makes printing faster and easier with multiple printers
HELIOS OVER-MOLDED TRUNK, DROP AND WHIP CABLE ASSEMBLIES
Available in Y, X, T, and R configurations
TUV and UL certified
Designed for plug and play solar installs in harsh environments
IP68 rated

HELIOS H4 PV CABLE CONNECTORS & BULKHEAD CONNECTORS
Available in Stamped & Formed or Machine Contacts
Available in 14AWG, 12AWG, 10AWG, 8AWG
Fully intermateable with industry standards
Rated 1000V UL, 1500V TUV
IP 68 rated, audible snap-in lock feature

HELIOS H4 BRANCH CONNECTORS
Fully intermateable with industry standards
Branch type -2 female / 1 male
Branch type -2 male / 1 female

HELIOLUG PART # HGLUI
First UL 2703 certified grounding component
Comes complete with SS hardware
Approved for maximum system voltage of 1000V
Accommates 12-4 AWG bare copper wire

TOOL KIT PART # H4TK0000
Waterproof case with foam inserts
Includes: Hand crimper, die and locator for both machined and S&F contacts,
Cable cutter, cable stripper, Unlock tool, wrench tool, socket for cable gland,
Socket for bulkhead gland, assorted contacts

POWERLINK PV CABLE
PV rated wire UL 4703, XLP insulator
Available in 8, 10, 12 and 14AWG
Colors: Black, Red, White

INLINE AND OVER-MOLDED DIODE AND FUSE
IP 68 rated
Cable range: 14AWG – 8AWG
Voltage rating: 1500V max for diode
Surge rating: 600V max for fuse
Connector options: M-M, M-F, F-F
828 SERIES PANEL-FEED THROUGH TERMINAL BLOCK
40A, 600V
16 – 6 AWG wire range
Tool-less installation into the panel cutout AND tool-less termination
Reliable, maintenance-free, easy solution for wiring through panel/enclosure walls

811 SERIES FUSE HOLDER
30A, 600 V AC/DC Class CC and midget fuse holder
30A, 1000 V DC photovoltaic fuse holder
Available in multi-pole configuration and with indication
14 – 6 AWG wire range
Reliable, maintenance free wiring for fusing needs in solar combiner boxes

2706 & 2716 SERIES HIGH CURRENT PCB TERMINAL BLOCKS
30A - 65A, 600V
20 - 6 AWG wire range
7.5mm, 10mm, 12.5mm, and 15mm pin spacing options
Jumper-able options available
Reliable, maintenance-free, easy wiring for power electronics applications

857 SERIES TRANSDUCER, RELAY, AND OPTOCOUPLER MODULES
Industries most compact 6mm width maximizing panel space
Flexible jumpering system eliminates redundant wiring
Configurable modules increase flexibility and reduce inventory/part numbers
Safe operation with three-way isolation (2.5kV)
CAGE CLAMP®S termination technology

862 SERIES COST EFFECTIVE TERMINAL BLOCKS FOR CHASSIS MOUNTING
CAGE CLAMP®S termination technology allows solid or stranded conductor
Connects up to 4 conductors sized 0.5 mm² to 4 mm² (AWG 20–12) per potential
Snap-in mounting feet for fast assembly
Built-in test points simplify testing with 2 mm Ø test plug

222 SERIES LEVER-NUTS, COMPACT SPLICING CONNECTORS
For all connections requiring stranded or solid conductors
Accommodates a wide range of wire sizes from 12-28 AWG, available in 2,3, and 5 pole configurations
Low installed cost and safe operation with built in test point
A reusable connector

2006 SERIES – FEED-THROUGH AND DISCONNECT TERMINAL BLOCKS FOR 1,000V APPLICATIONS
Perfectly suited for applications with high cutoff voltages
Safe disconnect function at voltages up to 1500 V DC
Accommodates 20 – 8 AWG
Rated 30 A at 1,000 V (UL pending)
KILOVAC CONTACOR
200A or 500A version
Typically used as main relay, accessory relay or high speed pre-charge relay for solar combiner/inverter application

PCFN SOLAR RELAY
1 pole 26A, 1 form A (NO) contact, 1.8mm contact gap
Designed specifically for solar inverters and charging stations
VDE REG.-Nr.A951, UL 508

T9S RELAY
1 pole 35A, 1 form A (NO) contact
12 VDC coil voltage
Designed specifically for solar inverters
UL E22575

SOLARLOK GROUND BOLT
Stainless steel hardware
6-12 AWG
#8-32UNC or #10-32 UNF
UL 467

SOLARLOK GROUNDING CLIP
High conductivity copper contact with steel screw to avoid electro corrosion
Accomodates 10-12 AWG ground wire
Thread cutting or screw and nut mounting option
UL 467

SOLAR CABLE
USE-2 type (North American installs)
Available in 10, 12 and 14 AWG
600 VDC rated
UL approved

SOLARLOK PV4 CONNECTOR
This robust weather-proof, IP68 compliant connector is engineered for reliable performance, in demanding and harsh environments.
Audible snap-in lock feature withstands accidental pulls without any interruptions
Fully interchangeable with industry standard interface
Rated voltage: 600V / 1000V (UL); 1000V (TUV)
NEC 2008/2011 compliant

PV SOLAR LABELS
A complete offering of preprinted and thermal transfer labels
Meet NEC & IFC standards for printed text, character height, color and outdoor UV stability
Excellent durability in UV, rain, humidity, cold and salt spray
Identification and rating labels available

KILOVAC, SOLARLOK, TE Connectivity and TE connectivity (logo) are trademarks.
CABLE CLIPS
Construct of corrosion resistant 304 stainless steel
Designed for 1, 2 or 4 wires. Rt. angle clip accommodates 2 wires
Special tab for easy installation & removal
Designed to prevent damage to cable insulation
Custom designs are available

ACE CONDUIT ENTRY BOX
Makes transitions from USE-2 or PV array wire to conduit protected THWN-2 wire simple
UV resistant & NEMA 3R rated enclosure
Compatible with any conduit type
Convenient side and bottom conduit drill out allow for easy conduit routing

GROUNDING STRAPS
Tin plated, braided copper wire available with or without a WEEB®
Available assembled & unassembled, and with and without hardware
Listed to ANSI/UL 467
Able to sustain equivalent current to 6AWG copper wire (1530A for 6 seconds)
Custom sizes are available

GROUNDING LUGS
Tin plated, copper lug available with or without a WEEB®
Low profile design allows for quick and easy installation
Available assembled & unassembled
Accommodates one 14 AWG to 6 AWG or two 10 AWG, two 12 AWG
Recognized to UL 2703
Custom designs are available

WEEB®, WASHER ELECTRICAL EQUIPMENT BOND
Bonds solar PV modules to mounting structures & creates an electrical path to ground
Greatly reduces the amount of labor and materials used in installations
Constructed of corrosion resistant 304 stainless steel
Listed to ANSI/UL 467
Recognized to UL 2703
Custom designs are available