# **PV Solar Wiring Solutions**

# • ON TIME • ACCURATE • FLEXIBLE SERVICE • CUSTOM SOLUTIONS



# **OUR GOAL:**

# **Save You Time and Money in the Field!**

Priority Wire & Cable helps contractors to be as efficient as possible in the field. That means reduced labor, reduced time to install, on-time commissioning. If your cable supplier is costing you money with late deliveries, inaccurate shipments, poor communication or defective product you need a new supplier. Priority will solve these problems and eliminate unexpected costs.

Top Quality Priority Wire & Cable products have been tested, approved and proven by the most demanding EPC's, Panel Manufacturers and OEM's in the solar industry. Our long-term relationships are proof of the job done right.









## Aluminum PV Cable 1K/2KV 90°C Wet/105°C Dry

Application:	PV Cables are suitable for use in solar power, Type UL 4703 PV, Type USE-2 and Type RHW-2 applications, which require superior resistance to flame and extreme temperatures. PV Cables are suitable for direct burial applications. PV Cables are to be used up to 90°C temperatures in wet locations and up to 105°C in dry locations.
Construction:	A stranded soft drawn bare 8000 Series Aluminum conductor, per ASTM.
Insulation:	Cross-linked polyethylene XLP insulation, which is gas/oil and sunlight resistant. Standard colors are black, white, red 8 awg - 1000 MCM and green in size 4awg-1/0. Other colors or stripes are available upon request.
Standards:	UL listed as Photovoltaic Cable per Standard Subject 4703, 44 & 854 VW-1 flame test UL 1581 CSA Listed RPV490 under CSA C22.2 No. 271 Sunlight Resistant Direct Burial RoHS compliant
Value Solutions:	Parallels, triplex, circuit cuts, custom labeling "Just in Time" shipping per installation schedule 24/7/365 service Fast delivery from largest inventory in USA

#### 600V & 1KV/2KV Copper PV Cable

Application: For use in interconnection wiring of grounded and ungrounded photovoltaic power systems.
 Construction: Stranded copper conductors. Cross-linked polyethylene (XLPE) insulation.
 Standards: UL listed PV wire under UL44, UL 1581 and UL4703 Photovoltaic Wires

 -40°C to 90°C wet or dry
 VW-1 rated per UL1581
 Sunlight Resistant
 Direct Burial

## Aluminum Conductor 35KV MV90 – Concentric Neutral

Application:	Aluminum Conductor 35KV cable is primary used for underground distribution, in direct burial or installed in conduit. 35KV cable is suitable for use in wet or dry locations. Cable is to be used at 35,000 volts or less and not to exceed 90°C temperature in normal use.
Construction:	A solid or compressed concentric strand soft drawn 1350 series aluminum conductor per ASTM.
Conductor	An extruded thermoset semiconducting shield, which is free stripping from the conductor and bonded to the insulation.
Insulation:	Naturally high dielectric strength TR-XLPE insulation. There is also extruded thermoset semiconducting insulation shield. Optional EPR insulation is available upon request.
Metallic Shield:	A concentric neutral shield consisting of solid bare copper wires helically applied and uniformly spaced over the insulation shield.
Jacket:	A black jacket of linear low density polyethylene (LLDPE), which is sunlight, abrasion and heat resistant. The jacket has 3 red stripes, the NEC lightning bolt and sequential footage markings.
Standards:	ASTM B-3, B-8, B230, B-231, B-609 ANSI/ICEA S-94-649 AEIC CS-8 <b>RUS ACCEPTED</b> For 90°C continuous, 130°C emergency and 250°C short-circuit operation UL MV90

# WWW.PRIORITYWIRE.COM

# Aluminum Single Conductor 15KV & 35KV MV-105 EPR/PVC Copper Tape Shield

Application:	Shielded MV-105 cable is primarily used for power circuits in commercial, industrial, refinery and petro-chemical plants; utility power generation and substations. The cable can be installed in wet or dry applications in cable tray sizes 1/0 & larger, duct, open air and direct burial. The cable is approved for temperature up to 105°C.
Construction:	Class B Compact concentric strand soft drawn annealed aluminum per ASTM.
Conductor Shield:	Extruded thermosetting semiconducting shield which is free stripping from the conductor and bonded to the insulation.
Insulation:	Natural high dielectric strength EPR-based insulation, combined with other materials and agents that enhance the electrical and mechanical characteristics assuring extended cable life.
Insulation Shield:	Extruded thermosetting semiconducting shield with controlled adhesion to the insulation providing the required balance between electrical integrity and ease of stripping.
Metallic Shield:	Helically applied non-magnetic copper tape(s) over the insulation shield with a minimum overlap of 25%.
Jacket:	Black sunlight resistant, non-migrating, polyvinyl chloride (PVC) jacket applied over the copper tape.
Standards:	AEIC CS8 ICEA S-93-639 ICEA S-97-682 UL 1072 IEEE 383 Flame Test IEEE 1202 Flame Test

### Tray Cable UL Type TC / TC-ER – 600V THHN/THWN-2 Insulation – with Ground – PVC Jacket

Application:	General purpose multi-conductor 600V power cables used for primary power/feeder circuits. For installation in cable trays in accordance with Article 336. Cable is approved for use in raceways, supported by messenger wire in open air, for direct burial applications, in Class I & II division 2 hazardous locations and for Class 1 circuits as permitted in Article 725.11(b). May be installed in both wet and dry locations or in areas exposed to chemicals and oils.
Construction:	Soft bare annealed copper per ASTM B-3, Class B stranding per ASTM B-8.
Insulation:	Heat and moisture resistant Polyvinylchloride (PVC) per UL 62. Clear Polyamide (Nylon) jacket per UL 62. Insulation meets requirements of Type THHN/THWN-2 as specified by UL83. The insulation is flame retardant and is rated for use at 90°C wet or dry.
Ground:	Soft bare annealed copper per ASTM B-3, Class B stranding per ASTM B-8.
Color Code:	ICEA Method M4 (black and numbered).
Assembly:	Conductors and ground are cabled together with or without fillers as required to form a round, compact cable core and with a binder tape.
Flame Test:	IEEE 383 70,000 BTU vertical tray flame test





# **Priority Solar Projects Across the US**



## **Priority Capabilities:**

Cut to length Paralleling Triplexing CIC (Cable in Conduit) Armoring Striping Splice Kits (MV Cable) Termination Kits (MV Cable) Pulling Eyes Custom Labels Kitting Same Day Shipping 24 Hour Emergency Hotline

## Premier Supplier of Wire & Cable

Aluminum Building Wire Portable Cord Extension Cords Fire Alarm Belden® Equals Ground Rods THHN Colors Range & Dryer Welding Cable Bare Copper Utility Aluminum MC Cable Tray Cable PV Cable Medium Voltage Coax, Cat 5e & 6 Thermostat Wire Flexible Conduit

