



UTX™ PV Cable Connector

The UTX™ from Amphenol Industrial Solar Technologies (AIST) is a robust, triple-certified DC connector with UL 6703 1500V, IEC 62852 1500V (Class A), and JET IEC 61730 1500V specifications, making it the first connector available for usage in all major global PV markets. The UTX™ is an evolution of AIST's well-known H4 connector, with the same solar industry-standard mating configuration, Amphenol's low resistance RADSOK® contact technology, ability to accept wire gauges from 14AWG/2.5mm² to 8AWG/10mm², and an IP68 rating. Enhancements over the H4 include the UTX™'s ratcheting gland back nut, which prevents backspin once the nut is tightened. The total volume and characteristics of the materials used to make the UTX™ have been optimized to result in a more efficient and robust design. By using gland nuts, environmental gaskets, wire-retention collets, and contacts that accept multiple wire gauges, part count and total SKUs go down, while cost-savings go up. AIST's UTX™ connector is the ideal choice for all PV modules and installations, regardless of end-market, around the world.

Features:

- Triple-Certified to by UL, TÜV, and JET to 1500V
- Guaranteed to reliably mate with AIST's entire PV product line
- NEC Code Compliant (no locking sleeve required)
- 0.25 mΩ low resistance RADSOK® contact
- Accepts wire gauges from 14AWG/2.5mm² to 8AWG/10mm²
- UTX cable OD range from Ø4.5mm to Ø7.4mm
- UTX-XL cable OD range from Ø7.6mm to Ø9.3mm
- IP68 Rating (mated)
- UL94 V-0 (self extinguishing)
- RoHS, REACH, PAHS, and Halogen-free compliant
- Wide operating temperature range of -40°C to 90°C



UTX™ PV Connector



E 469330



R 50340393



1650-C4302-170



Technical Data

| | | | |
|-----------------------------|--|---|--|
| Rated Voltages & Currents | UL | 1500V per UL 6703 | 15A (2.5mm ² /14AWG), 20A (4.0mm ² /12AWG), 30A (6.0mm ² /10AWG), 50A (10.0mm ² /8AWG) |
| | TÜV | 1500V per IEC 62852, Class A Unrestricted Use | 31A @85°C; 29A @90°C (2.5mm ² /14AWG), 42A @85°C; 39A @90°C (4.0mm ² /12AWG), 53A @85°C; 49A @90°C (6.0mm ² /10AWG), 75A @85°C; 69A @90°C (10.0mm ² /8AWG) |
| | JET | 1500V per IEC 61730 | 30A (2.5mm ² /14AWG), 40A (4.0mm ² /12AWG), 50A (6.0mm ² /10AWG) |
| Typical contract resistance | 0.25mΩ using Amphenol's low resistance RADSOK® contact technology | | |
| Contact material | Tin-plated Copper Alloy, for excellent corrosion resistance and conductivity | | |
| Contact system options | Machined/Cold-formed (CF) or Stamped & Formed (S&F), both with Amphenol's RADSOK® Insert | | |
| Cable OD ranges | Ø4.5 – 7.4mm for Sizes 2.5mm ² /14AWG to 6.0mm ² /10AWG (UTX) & Ø7.6 – 9.3mm for Size 10.0mm ² /8AWG (UTX-XL) | | |
| Locking mechanism | Meets 2014 NEC NFPA 70, 690.33(C) requirement for self-locking with tool-required unlock | | |
| Cable strain relief | Compression gland featuring a torque-limiting, ratcheting gland nut (when used with tool UTXTW0001, below) | | |
| Ingress Protection Rating | IP68, mated (1 meter, 1 hour) & IP2X touch-proof (reverse gender design) | | |
| Ambient temperature range | -40°C to +90°C | | |
| Environmental Ratings | <i>Flammability Classification:</i> UL 94 V-0 <i>UV Resistance:</i> Outdoor suitable (f1) rated materials, per UL 746C | | |
| Intermatibility | Guaranteed to mate with all of the latest Amphenol PV connectors, regardless of gage, style, or product line | | |
| Material Safety | RoHS, REACH, PAHS, and Halogen-free compliant | | |

How to Order a Connector (please choose one code per position)

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | | | |
|--------------|------------------|-----------------|--------------|-----------------------------|--------------------------|----------------------------|--|---|--------------|
| Product Line | Product Type | Gender | Contact Type | Cable Size | Certifications | | | | |
| UTX | C (Connector) | F Female (+) | A | S&F Contact* | 0 | Without Contact | A Triple Certifications for UTX (UL/TÜV/JET) Dual Certifications for UTX-XL (UL/TÜV) | I | 1 pc/bag |
| | | | B | CF Contact | 2 | 2.5mm ² / 14AWG | | C | 100 pcs/bags |
| | | M Male (-) | L | CF Contact for UTX-XL, only | 4 | 4mm ² / 12AWG | | M | 500 pcs/bags |
| | | | | | 6 | 6mm ² / 10AWG | | | |
| | | | | 8 | 10mm ² / 8AWG | | | | |

*When ordering a S&F contact, please use cable size order code "4" for both 4.0mm²/ 12AWG & 6.0mm²/ 10AWG

How to Order Contacts on a Reel (please choose one code per position)

| 1 | 2 | 3 | 4 | 5 | |
|----------------|----------------|--------|------------|-----------|----------------------|
| Product Family | Product Type | Gender | Cable Size | Packaging | |
| UTX | F (Contact) | F | Female (+) | 2 | R (2000 pcs/reel) |
| | | M | Male (-) | 4 | |

Tool and Accessory Order Codes

| | |
|---------------------------------|-----------|
| UTX Sealing Cap (for female) | UTXPF |
| UTX Sealing Cap (for male) | UTXPM |
| UTX Crimp Tool for CF Contacts | UTXTC0001 |
| UTX Crimp Tool for S&F contacts | UTXTC0002 |
| UTX Wrench Tool | UTXTWA001 |
| UTX-XL Wrench Tool | UTXTWL001 |
| UTX Socket Tool | H4TTW100 |



UTX Crimp Tool



UTX Wrench Tool



UTX-XL Wrench Tool



UTX Socket Tool



UTX Male Sealing Cap



UTX Female Sealing Cap

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