Cristek Interconnects Inc.



IPP has represented Cristek across Europe for over 35 years. Together, we have established a reputation for innovative interconnect solutions spanning simpler custom Micro-D connectors, through transient and EMI filtered connectors, to complex harness configurations, offering custom solutions for mission-critical applications. Cristek's extensive range of interconnect technologies and deep commitment to process discipline provide even the most demanding customers with rapid, seamless progression through concept, proof of design, proof of manufacture and full-scale production.



Connectors & harnesses

We are focused on solutions for:

- Radar Systems
- Airborne and Spacecraft Applications
- Missiles
- Soldier-borne Equipment
- Marine Systems
- Ground Systems
- Vehicle Systems

It is ideal for any demanding applications requiring small packaging, high precision, and reliability, in addition to offering extensive R&D and custom product capabilities.

Cristek manufactures a complete line of military-off-the-shelf (MOTS) products using the Micro-D and Nano-D QPL contact systems as the basis for application specific connectors and cables

Product range:

- Micro-D per MIL-DTL-83513
- Nano-D per MIL-DTL-32139
- D-Sub per MIL-DTL-24308
- Filter connectors
- Compliant Pin Stackers



Micro-D

Available in several PCB mounting or preterminated wire options, plastic or metal and hybrid packages, with IP-67/68 sealing, in power and high frequency RF combinations, with EMI protection features, filtered and as specials.



Micro- and Nano-Strips

Ultraminiature, rugged and affordable strip line connectors Wire-to-wire, board-to-board and board-to-wire versions are available with many options.



Miniaturized Circular

Connectors can be designed with Micro, Nano, RF or high voltage contacts. Products can be quick disconnect, EMI filtered, IP68 sealed, protected against fluid immersion, custom cable termination and/or molding or alternatively a turnkey cable specifically engineered to meet your needs.



Nano-D

1600 contacts per square inch. This leap in high reliability and high contact density suited for high-speed signals, reduced board packaging and weight saving. Available in plastic and metalized packages, in strip, D and circular layouts, in wire, through hole PCB and surface mount PCB termination versions.



Filter

EMP, NEMP and LEMP surge protection is available on all basic connector styles.

Most customers require special modifications and designs to support their unique application.

We welcome your inquiries for special applications.



Connectors & Harnesses

- Overmolding & potting
- Machine overbraid, shielding & jacketing (e.g. Kevlar®)
- 3D fixturing for complex wire harnesses
- Solderless termination of Micro-D and Nano-D into harnesses





Cable assemblies & Custom solutions

Thanks to specific equipment as well as experienced and certified technicians, Cristek has developed significant expertise in cable assemblies and is equally competent in supporting "build-to-print" and "concept-to-production" harnessing requirements.

Any connector content, wires range from 8 AWG to 34 AWG, overmolding & potting, machine overbraid, shielding & jacketing (e.g. Kevlar®), complex wire harnesses requiring three dimensional fixturing, solderless termination of micro- and nano-miniature connectors and backshells.

More and more customers require not only high quality and reliable connectors but also want to reduce their cost by buying complete pre-wired connectors. We welcome your inquiries for cable assemblies to fit your application.



Twist Capsule Mechanisms for Space

The Twist Capsule is a unique electromechanical assembly designed to transfer power and data through a mechanical joint with rotation in either direction up to 175 degrees. This setup allows for a flexible circuit to wrap and unwrap during rotation.

Cristek's proficiency in highdensity connector design has played a key role in establishing this innovative product line.







Orion Series

- Effective Slip ring alternative
- Designed for power transfer, can carry up to 90 Amps in a form factor aperture of 0/12.8
- Can use 1 to 8 connector interfaces transmission of up to 111 discrete lines
- Fully redundant power pins available with multiple points of contact
- Heat sinking to chassis body to meet thermal requirements



- Intended for cost-driven terrestrial lab, field, military, or commercial space applications
- This Twist Capsule is designed to withstand temperature extremes, radiation, and vacuum conditions
- Radiation-tolerant COTS electronics or screened to GSFC EEE-INST-002 Level 1 or 2
- Up to 740 discrete lines with several protocols used



Aquila Series High Frequency and Transmission: Space Application

- Up to 80dB of signal shielding IAW MIL-STD-461
- Proprietary shielding provides cable harness level protection while supporting rotational needs
- Designed to deliver high performance and high reliability for extended on-orbit missions
- Space variant with electronic components screened and qualified to GSFC EEE-INST-002 Level 2 or higher
- Structural, Thermal, Radiation Analyses provided to Specific Mission or Orbital profiles
- Wide array of interfacing configurations and geometry

