

INTERCONNECT SOLUTIONS



Making Connections in Harsh Environments



TELEDYNE IMPULSE

A Teledyne Technologies Company

www.teledyneimpulse.com



Service & Support

Teledyne Impulse designs and manufactures high reliability electrical and optical interconnection systems, motorized power transfer switches, and custom insert molded compression connectors for a broad range of harsh environment applications. The company's products are proven performers in the most demanding applications, which include oceanographic exploration, spacecraft and launch vehicles, defense, oil and gas production, nuclear systems, and wastewater management.

From miniature underwater sensor connectors to the largest extremely rugged vehicle systems, Teledyne Impulse has created many innovative connection solutions. By using standard products and custom engineered designs, Teledyne Impulse offers the widest range of application specific connection systems available.

Founded in 1978, Teledyne Impulse has more than 30 years experience in providing interconnect solutions for the toughest environments. The company is now part of Teledyne Technologies, a leading worldwide provider of sophisticated electronic components, instruments, and communications products, serving niche market segments where performance, precision, quality, and reliability are critical.

The company's commitment to customer satisfaction, quality assurance, and rapid response is unsurpassed. Through precise and innovative engineering, flexible manufacturing processes, and dedicated customer support, Teledyne Impulse provides industries worldwide with highly reliable and cost-effective interconnection solutions.

HARSH ENVIRONMENT APPLICATIONS

- Subsea instrumentation, sensors, & control systems
- Autonomous & remotely operated underwater vehicles
- Downhole instrumentation & logging systems
- Robotic crawlers & pipeline inspection systems
- Military communication systems
- Spacecraft & launch vehicles
- Medical instruments



The People

Teledyne Impulse embraces a long-term commitment to customer satisfaction, product excellence, and innovation with over 90 highly qualified personnel in Engineering, Manufacturing, Quality Assurance, and Customer Support.

ENGINEERING

Teledyne Impulse application experts meet the challenge of harsh environment interconnect requirements with flexible and innovative customer specific solutions. Utilizing state-of-the-art 3D modeling software, Teledyne Impulse engineers apply their research and development expertise to foster new designs, processes, and materials. Working with customers on joint design and development teams enables Teledyne Impulse to rapidly provide optimized application specific solutions.

MANUFACTURING

At its purpose-built 43,000 sq ft manufacturing facility in San Diego, California, Teledyne Impulse uses efficient production techniques and advanced tooling to maintain the highest standards of quality and support. The flexible layout and in-house tooling capabilities result in industry leading delivery times for standard and custom products. The company's investment in experienced, highly skilled manufacturing personnel yields proven product performance, quality, and reliability.

QUALITY ASSURANCE

Integrity and high reliability are key Teledyne Impulse commitments. Comprehensive procedures, ongoing personnel training and detailed inspection using sophisticated test equipment results in products of the highest quality, assuring satisfaction.

CUSTOMER SUPPORT

Teledyne Impulse leads the industry in dedicated customer support for the Americas, Europe, Australasia, and the Pacific Rim. Unsurpassed service, on-time delivery and innovative interconnect solutions for harsh environments meet or exceed the needs of every customer.



Products & Solutions

The success of Teledyne Impulse with industries throughout the world is continually and effectively demonstrated by its track record of proven product performance, quality, and reliability.

STANDARD PRODUCTS

Teledyne Impulse's standard products are available in a wide variety of configurations and materials to



suit any application or environment. This diversity of products, together with the company's impressive quantity of stocked parts and rapid response manufacturing capabilities, demonstrate why Teledyne Impulse is the obvious choice for OEMs across the globe.

All standard bulkhead connectors have an open face pressure rating of at least 5,000 PSI, with mated pressure ratings ranging from 7,500 PSI to 20,000 PSI.

WHICH SOLUTION WORKS FOR YOU? Off the shelf or designed to your specific engineering

Custom Solutions

In addition to its standard products, Teledyne Impulse offers custom solutions that meet the company's same high standards of performance, quality, and reliability.

CUSTOM CONNECTORS

The demands of some applications require the use of custom engineered, non-standard solutions. Teledyne Impulse has the knowledge, experience, and capabilities to meet these challenges. Customers are always supplied with the best possible solutions

for their harsh environment interconnect applications, from minor modifications of standard parts to the design and manufacture of completely new connection systems. Dedicated application engineers utilizing extensive in-house design and manufacturing capabilities ensure orders for custom design and development are completed quickly and efficiently.



CUSTOM CABLE ASSEMBLIES

From one-time, large sensor array cables to high volume molded assemblies, Teledyne

The following are the three main styles of Teledyne Impulse standard connection solutions:

DRY MATEABLE

This style is designed to be mated in a dry environment and are fully pressure rated once mated. These connectors range in size from extremely small underwater sensor connectors to large and rugged metal shell products. The rubber-molded and glass-reinforced epoxy parts are low-cost, making them a convenient yet reliable solution. Miniature, high-density metal shell connectors allow many contacts to be housed in a small area. Most of these products are designed for use with molded cable assemblies however there are also several oil-filled or pressure-balanced oil-filled options available.

WET MATEABLE

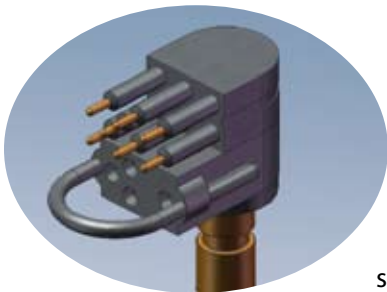
This style is designed with a seal on each individual contact, so that it can be mated wet, without causing shorting. Depending on the application environment or cable used, they are molded in neoprene or polyurethane. These connectors are available in a circular or low-profile, right-angled design. They are also available housed in rugged metal shells that enable the parts to be blind-mated.

UNDERWATER MATEABLE

This style is a pressure balanced, molded connector that allows mating and unmating at different depths, for various diver-based applications.

Other Teledyne Impulse standard products include molded penetrator assemblies, magnetically operated proximity switches, and thermal wire strippers.

needs, Teledyne Impulse makes the connection.



Impulse provides a broad range of custom cable assemblies. Many customers rely on Teledyne Impulse to supply turnkey assemblies,

using components and

cable furnished by Teledyne Impulse or the customer. Teledyne Impulse can produce cable assemblies using an assortment of standard 'T', 'Y' and splice molds, and can also design and manufacture custom molds as required. Most assemblies are molded in neoprene or polyurethane, although other materials such as Hypalon and Viton are used when necessary.

CUSTOM PRODUCTS

From extremely high reliability aerospace power transfer switches to encapsulated electronic packages, Teledyne Impulse



supplies a variety of custom engineered, non-connector related products for harsh environment applications. The company's proven product quality together with its history of rapid delivery time has generated a performance record that customers have come to rely on.

GLOBAL PRESENCE



Teledyne Impulse is dedicated to achieving total customer satisfaction through unsurpassed service, on-time delivery, and products that meet or exceed customer expectations for quality and performance.

Teledyne Impulse is a proud member of:

-  **TELEDYNE MARINE** www.teledynemarine.com
-  **TELEDYNE OIL & GAS** www.teledyneoilandgas.com
-  **TELEDYNE NUCLEAR** www.teledynenuclear.com
-  **TELEDYNE SPACE** www.teledynespace.com

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