

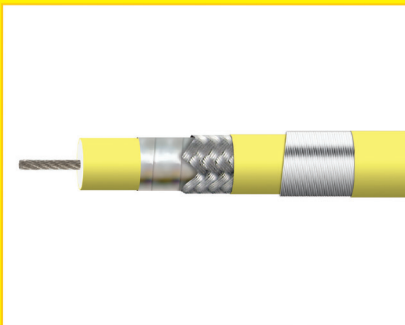


INSULATED WIRE
INCORPORATED

IW MICROWAVE
SHORT FORM
CATALOG **2025**

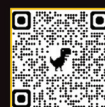
Innovative specialists in
manufacture of microwave
cable & cable assemblies

Product Family



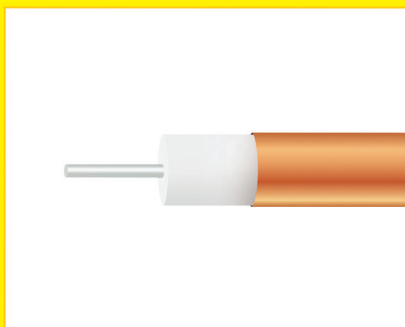
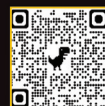
LOW LOSS/PHASE STABLE

Range of line sizes providing exceptional attenuation performance and phase stability for applications from sub-surface to space. Custom cable and cable assembly designs based on our unique laminated Teflon dielectrics up to 135 GHz.



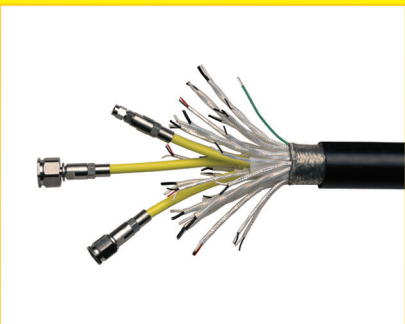
RE-FLEX™

The original double-shielded alternative to semi-rigid and conformable cables that perform to 62 GHz. Available in industry standard line sizes that support a wide range of interconnect options, with a range of standard length SMA/SMA assemblies and our Re-Flex Starter Kits.



SEMI-RIGID COAX

Our standard product features 50 ohm cable; however, thanks to our advanced lamination technique, we can offer custom impedance semi-rigid cables tailored to meet specific requirements. All our semi-rigid cables are available with a bare copper or plated finish, and can be shipped as coils or cut lengths. We offer standard RG line sizes performing up to 60 GHz

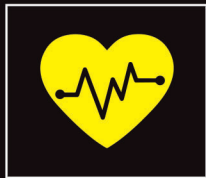


NON-RF PRODUCTS

IW's initial product development was data cable for high temperature/harsh environment oil & gas market applications. We continue to support this market, and also provide a range of wire types to 33AWG including hook-up wire, twisted pair/triple and custom composites using Teflon and copper based designs.



Markets Served



- Aerospace
- Sub-Surfa
- SatCom
- Missiles
- Ground Vehicles

- High End Audio
- Tactical Data Links
- IFF Systems
- CIWS
- UAVs

- Medical Electronics
- ECMs
- Geothermal Exploration
- Instrumentation
- High End Broadcast Telecommunications

IW serves a broad range of both military and commercial markets. These include telecommunications, data links, satellite systems, airborne electronic warfare and counter measures, missile systems, UAV applications, avionics and instrumentation, fire control systems, medical electronics, and geophysical exploration.

Cable Assemblies

IW's extremely low loss cable assemblies are optimized for operation in their respective frequency bands from the low MHz to 110 GHz. Upon request we have the ability to accommodate custom assembly configurations, and can extrude a broad range of jacketing materials.

All of IW's coaxial cables are available as finished assemblies, including partially terminated cables, fully terminated, plus phase or time delay and offset matched sets.

With a wide range of interconnect products available, we're able to offer custom cable assembly lengths from a few inches to 100ft and above to suit your application. We offer a variety of connectors including SMA, TNCA, N-type, 3.5mm, 2.92mm, 1.85mm in straight, right angle, male and female, with bulkhead and four-hole flange mounting options available on some designs.

All connectors are designed to meet the requirements of MIL-PRF-39012 with interfaces compliant to MIL-STD-348. Our stainless steel designs ensure performance to 18 GHz for SMA, TNCA, and N-type, with right angle parts using swept center contacts to ensure optimum performance.

For high power applications, C, SC, 7/16, 1 5/8 and 3 1/8 EIA flanges are available for larger diameter cables (280, 480, 750 series), designed to ensure reliability in terms of power handling and heat transfer for continuous wave applications.

At millimeter wave, our smaller diameter cables (125, 115, 0471, 0341) have been developed to be compatible with industry standard connectors including most push-on interface styles, in addition to high frequency threaded types, with IW now offering cable assemblies that provide performance to 110 GHz.

Optional Protection

BESPOKE PROTECTION

Microwave transmission lines are quite often exposed to a wide range of hostile environments. These may include extreme temperature, abrasion, comprehensive forces, high pressure fluids, solvents, chemicals, salt water, UV, vibration, and mechanical stress, just to name a few.

CUSTOM SOLUTIONS

In addition to our internally ruggedized cables, IW has a wide range of materials and processes designed to protect the integrity of our cable assemblies. These include a variety of metallic and non-metallic external sheaths to address your specific application. Please contact us for details.

Tefzel™ jacket

Tefzel™ is a trademark of Chemours Company FC, LLC

Fire resistant Nomex® braid

Nomex® is a registered trademark of the DuPont Corporation

Interlocked stainless steel armor

Crush resistant up to 400 lbs per linear inch

Neoprene weather proof jacket

A armor w/extruded Polyurethane jacket





INSULATED WIRE INC

960 Sylvan Avenue,
Bayport, NY 11705

t +1 631-472-4070
e nysales@insulatedwire.com

www.insulatedwire.com

Visit our website for contact
information on your local representative.

Please don't hesitate to contact IW directly if you are
unable to locate a representative in your area.



AS9100 & ISO 9001 Certified



Contact us to find out where your nearest
local IW representative is located