TIMES MICROWAVE SYSTEMS
AN AMPHENOL COMPANY

sign of the times

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SiO2 Cable Assemblies

SiO2 is a silicon dioxide dielectric cable designed for specific applications when low-density high-velocity PTFE isn't ideal. These are extreme environmental applications with requirements of:

- Extreme temperatures from just above absolute zero to 900°C
- A need for strict phase stability
- Radiation where cables must withstand up to 100 mega rads

Well known to the microelectronics industry for its excellent insulating properties, silicon dioxide dielectrics are low loss, high-velocity, and can perform in extreme temperature ranges while maintaining excellent phase stability. SiO2 cable construction includes a solid oxygen-free copper center conductor, an SiO2 insulating dielectric, and a stainless-steel jacket with copper cladding to act as the outer conductor. These assemblies have laser welded connectors and a glass to metal hermetic seal on the interface to seal the assembly.

SiO2 is idea for:

For harsh environmental conditions where needing the ultimate in phase tracking performance, SiO2 semi-rigid cable assemblies are ideal.

Upcoming Tradeshows

Save 20% with our code SPEX20!

Schedule time to meet with our team!

Check out all our upcoming tradeshows and stop by our booth!

AUVSI™ APR 23RD - 25TH SAN DIEGO, CA Booth # 4452

SPACE TECH EXPO USA MAY 14TH - 15TH LONG BEACH, CA Booth # 7037

AOC Europe Oslo, Norway MAY 13TH - 15TH OSLO, NORWAY Booth # E35

Product Spotlight

SiO2 cable assemblies are designed to meet the challenges of demanding environmental applications like hypersonic missiles and spaceflight. Low loss, high-velocity silicon dioxide dielectrics can perform in extreme temperature ranges up to 900°C while maintaining excellent phase stability

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Learn more about SiO2 cable assemblies

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Q: What is the limiting factor for high temperature cable assemblies?

A: The overall limiting factor for high temperature RF assemblies is current connector designs, which can withstand up to 650°C before any degradation in performance.

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