



➤ APPLICATION BULLETIN

PREPERM™ Solutions for Satellite Communications

PREPERM™ thermoplastics offer a wide variety of solutions for various SatCom applications: aerospace, maritime, other moving vehicles and GPS. Whether you are looking for a lens, radome, polarizer, substrate, fasteners or a helical antenna, we are happy to accept your challenge. Our offering covers it all, from top quality material to prototyping services and stock shapes in different shapes and sizes.

- Tight batch-to-batch tolerance
- Wide Dk range from 2.6 up to 23
- Lower weight and better impact resistance than ceramics
- Isotropic material suits well for narrow beam widths (less than 0.2°)
- Injection molding for complex shapes
- Low cost mass manufacturing

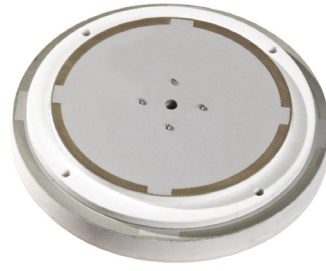


Whether we are talking about portable satellite terminals or stationary land stations, the material requirements are alike: reliable, low loss materials with low manufacturing costs, light weight and the ability to form complex shapes.



DIELECTRIC SUBSTRATES

PREPERM low-loss antenna substrates improve the antenna bandwidth and gain compared to common materials. Feasible form factors can be obtained even below 1 GHz with high permittivity materials.



GPS PATCH ANTENNAS

PREPERM combines high permittivity with very low losses and water absorption. Unlike ceramics, PREPERM patch antennas are not brittle and can be mass produced by injection molding.



LENSES AND DRAs

PREPERM grades have stable and well controlled dielectric constants up to 23. High-permittivity lenses are beneficial in high-gain applications while keeping the size reasonable.



PREPERM materials are used in a wide range of industries

Whether you operate in the field of telecom and 5G, automotive or industrial radars, or satellite communications, we have a solution for you. Ask for our non-toxic prototype materials for health technology applications, too!

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