



THE GUND COMPANY

Manufacturers & fabricators of engineered material solutions

ProDome GP Brochure

ProDOME® GP

Ultra-low loss polymer designed with versatility & 5G technology in mind.

- ***Ultra-low loss polymer designed with versatility & 5G technology in mind.***
- ***Ultra-low loss at high and low frequencies***
- ***High-strength reinforcement to improve stability and protection***
- ***Hydrophobic surface***
- ***Can be machined, injection-molded, and 3D printed***

5G application potential spans far beyond cellular network support. 5G opens the door to smart cities, IoT, and V2V technology. Using suitable materials to support base station antennas is critical, and ProDome® GP is the solution. ProDome® GP combines an EM transparent base polymer to improve antenna efficiency with a low-loss fiber reinforcement that improves strength and rigidity. The material also utilizes UV resistance and hydrophobicity additives to provide an application solution for long-term use.

For more information, Visit www.thegundcompany.com/prodome





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Item:	ProDome® GP	
Description:	ProDome® GP is a fiber-reinforced polypropylene blend with additives for increased UV resistance and hydrophobicity. It offers a low dielectric constant and dissipation factor over a wide frequency range with increased mechanical and weatherability properties for long-term outdoor use. ProDome® GP is specifically formulated for radomes in 5G, SATCOM, and IoT applications.	
Availability:	GP100 Series	GP100 can be injection molded, compression molded, and machined to shape. Standard forms: Sheet, rods, and tubes. Used for medium to high volume production.
	GP300 Series	GP300 can be injection molded, compression molded, 3D printed, and machined to shape. Standard forms: Sheet, rods, and tubes. Used for prototyping, low, medium, and high volume production.

Key Characteristics	Test Method	Units	GP100T	GP115T	GP130T	GP315d
Standard Color			White	White	White	White
Specific Gravity	D792		1.05	1.18	1.27	1.05
Notched Izod Impact	D256	(ft-lbs/in)	0.6	0.7	0.8	0.8
Tensile Strength @ Yield	D638	psi	3964	6597	7982	6881
Tensile Elongation @ Yield	D638	%	7.3	2.4	1.5	2.7
Tensile Strength @ Break	D638	psi	3289	6479	7935	6678
Tensile Elongation @ Break	D638	%	18.3	2.6	1.6	3
Tensile Modulus	D638	psi	246704	627590	1057015	568200
Flexural Strength	D790	psi	6645	10860	12091	11320
Flexural Modulus	D790	psi	222943	511699	940412	483381
Dielectric Constant @10Ghz	D150		2.28	2.46	2.74	2.44
Loss Tangent @ 10Ghz	D150		0.0007	0.0012	0.002	.0011
Contact Angle		--	105	105	105	100