

January 2025 Version 1.0

Technical Data Sheet: CF10 - PETg

Description: PETg CF10 blends the everyday reliability of PETg with a 10 % chopped-carbon-fiber boost, delivering stiffer, lighter parts without sacrificing printability. The dispersed fibers cut shrinkage and warpage, so large functional components stay dimensionally true—even on open-frame printers. Layer lines nearly disappear under the matte, graphite-black finish, while the composite structure raises tensile modulus and improves heat resistance over unfilled PETg.

With excellent bed adhesion, no abrasive glass-fiber strands, and a wide processing window (typically 240–260 °C), PETg CF10 is the go-to filament for rugged jigs, brackets, drone frames, and lightweight prototypes that need extra rigidity and a professional-looking surface straight off the bed.

Physical Properties	Standard	Units	Recorded Value
Density	ISO 1183	g/mL	1.31

Mechanical Properties	Standard	Unit	Recorded Value
Tensile Strength, Break	ISO 527	MPa	56
Elongation at break	ISO 527	%	4
Flexural Strength	ISO 178	MPa	86
Flexural Modulus	ISO 178	MPa	5975

Thermal Properties	Standard	Unit	Recorded Value
Glass Transition Temp. T _g	DSC	°C	75
Heat Deflection Temperature at 0.45 MPa	ISO 75	°C	81

Electrical Properties	Standard	Unit	Recorded Value
Surface Resistance	ASTM D257	Ω / sq	>10 ⁹

Printer Settings:

Extruder Temperature: 240-260°C

Build Plate Temperature: 75°C

Fan speed: 0-20%

Print Speed: < 1000 mm/s

Max Volumetric Flow: < 30 mm³ / s on 800 micron nozzles

Notice:

Typical values, not specifications. Performance varies with printer, part geometry, and settings. Users must verify fitness for purpose and comply with regulations. Modix Modular Technologies Inc. provides no warranties and assumes no liability.