POLYCARBONATE, THE BETTER TECHNOLOGY

Integra Enclosures pioneered the use of polycarbonate in electrical enclosures and we continue to raise the bar on the market today. Polycarbonate is widely superior compared to other enclosure materials because of its high tensile strength and prolonged durability. It is strong like steel yet cuts like butter, making it easier for users to install and modify enclosures in the field. Because of it's material make-up, polycarbonate maintains its durability and will not break down or fade in sunlight.

THE UNSURPASSED ADVANTAGES OF POLYCARBONATE ENCLOSURES

UV Protection

Integra polycarbonate enclosures carry an F1 rating for excellent UV protection. Unlike fiberglass enclosures, which break down when exposed to sunlight and moisture, polycarbonate remains strong even in harsh environments.

Impact Resistance

Polycarbonate enclosures have a dramatically higher tensile strength compared to other materials. Integra's polycarbonate lines have an impact resistance of over 900 in-lbs.

Ease of Modification

Polycarbonate enclosures are safe and easy to machine, with no harmful dust or splintering to worry about! Integra offers custom, in-house machining on all our polycarbonate enclosures.

POLYCARBONATE APPLICATIONS

Polycarbonate enclosures are a superior choice for a wide range of outdoor applications and environments:

- **Remote Monitoring -** Polycarbonate allows for radio waves to pass more freely without sacrificing protection.
- **Alternative Energy -** From solar to wind, keep systems safe from the sun, wind and water.
- **Water Treatment** - Water/wastewater treatment and sprinkler systems are well-protected in our 4X and 6P rated enclosures.
- **Utility & Electrical (Smart Grid) -** Utility applications that are housed outdoor are ideally enclosed in polycarbonate.
- **Marine & Marina -** Whether on-ship or at the dock, guard against corrosive saltwater and sun.

POLYCARBONATE & FIBERGLASS, WHICH IS BETTER?

	POLY	FIBERGLASS	
Impact Resistance	✓	✗	The average fiberglass enclosure tensile strength is approximately 220 in-lbs. Polycarbonate has a tensile strength of 900 in-lbs. **Polycarbonate has over 4 times the impact resistance of fiberglass.**
Weight	✓	✗	Whether it is saving on shipping cost or the ability for one person to carry and install a product in an enclosure, weight is increasingly important. **Polycarbonate is up to 40% lighter than fiberglass.**
UV Resistance	✓	✗	Fiberglass UV protection is offered as a shield or other coating that attempts to protect the fibers from the inevitable deterioration or even failure of the exterior coating. **With polycarbonate, the UV inhibitor is in the formulation and is uniformly integral to the enclosure.**
Ease of Modification	✓	✗	Fiberglass is tough on tools and often chips while machining, leaving sharp, unsightly edges. Also, fiberglass, upon drilling or cutting gives off a very fine dust that is difficult to clean up and is a skin and lung irritant. **Integra polycarbonate enclosures are easy to modify, do not give off dust and leave a clean, attractive surface with no sharp edges.**
Eco-friendly	✓	✗	Whether during the manufacturing process or at the end of the enclosure's life, fiberglass material cannot be reused and is destined for landfills. **Polycarbonate in the manufacturing process or at the end of its usable life is recyclable.**
Damage from Shipping/Handling	✓	✗	Fiberglass is a very brittle material, to the point that it risks damage anytime it is dropped or mishandled in any way. **Because of its durability, polycarbonate is rarely damaged from shipping or handling.**