BENEFITS AND COMPARISON OF ALUMINUM VS PLASTIC OR CARBON

DESAPRO has a 60 year heritage and is an international leader in designing and manufacturing of aluminum rack mounts, transit & equipment cases, as well as cooling solutions for the aerospace and defense industry. We offer a wide range of sizes and options. All cases are designed in response to the customers specifications and programs. DESAPRO continually focuses on finding innovative solutions to meet the customers requirements.

When engineering a packaging for a project, many details must be considered to ensure a successful and protective design for the specific application. Next to the dimensions of an enclosure, choosing the right material for the application can be equally important. Engineers must consider the conditions an enclosure will operate under in addition to the obvious project costs and aesthetic requirements.

Our most popular packaging solutions are made of aluminum. Not only is it durable and rugged to undergo harsh environments but also it has many more benefits shown below vs. other materials:

| Aluminum | Injection mold | Rotomold | Carbon Fiber |

Features	Aluminum	Injection Mold	Rotomold	Carbon Fiber
Weight of empty case	lightweight	+10-20 % heavier	+30-40% heavier	lightweight
Size (interior and exterior) dimensions	Can be manufactured to any size (no limitation)- usually significantly smaller dimensions	Due to tooling size limitation 10% larger dimensions	Due to tooling size limitation Up to 20% larger dimensions	Due to tooling size limitation
EMI	Protected (Faraday Cage)	None	None	None
Cost	10-30% more	30-50% less	20-30% less	30% more
Temperature stability 4°F to 103°F	--23°F to 117° F	Warps with high temperatures	Warps with high temperatures	Warps with high temperatures
Impact resistant	Very high	Medium (cracks possible)	Medium, (cracks possible)	Medium (cracks possible)
Fully Recyclable	Yes	No	No	No
Fire Resistant	High	Low	Low	Low

Aluminum cases meet the best size and weight criteria of applications and have many more benefits

CONTACT DESAPRO TODAY TO DISCUSS OUR FREE ENGINEERING SERVICES !