A BLACK & WHITE CHOICE:
## CHOOSING THE RIGHT COLOR FOR PANELS AND ENCLOSURES

In recent years, more network managers have switched to white equipment from traditional black, especially in data centers. This change goes beyond racks and cabinets — it also includes patch panels and enclosures. However, choosing the right color might not be as simple as what "looks better" — it requires more understanding of the application and customer needs. In this article, we will outline the reasons for both black and white panels and enclosures.

Reasons to use Black Patch panels and enclosures

Moves, Adds, and Changes with Legacy Installations — The large majority of existing applications use black equipment. By choosing black panels and enclosures when expanding or adding more equipment, the network will have a consistent and cohesive look with existing racks and cabinets.

Industrial or Factory Floor Applications — Black panels and enclosures tend to hide dirt and dust, and are harder to blemish or scuff. This becomes a consideration when network connections are located on the production floor of industrial and manufacturing facilities where dirt and dust are present.

Product Availability — Network installations in data centers and other environments are made up of a variety of equipment from numerous companies, covering servers, switches, power, cabling systems, cabinets, and more. Not all vendors offer white solutions, and since a uniform color scheme is usually preferred, black might be the only option available.
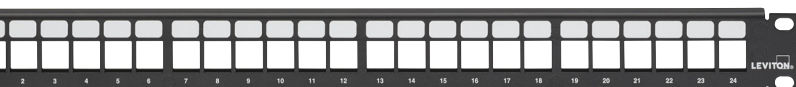
Reasons to use white patch panels and enclosures

Better Visibility for Installation/Maintenance — Trying to install and connect equipment in rows and rows of black racks and cabinets with cables, connectors, switches, etc. can become an issue. Cabinets and cable management can obstruct overhead light, and black racks and equipment tend to absorb what light is being filtered through. White, on the other hand, can reflect over 75% of light, making it brighter and easier to install equipment in the data center.

Greater Energy Savings — Energy management in data centers is always a concern. Temperature control and lighting are significant factors in a data center's ability to be as energy efficient as possible. Dark colors absorb light and as a result emit more heat, whereas lighter colors reflect light. By installing white equipment, data centers can save on both lighting costs and energy savings over traditional black equipment. This may become an important consideration when a facility is looking for LEED certification.
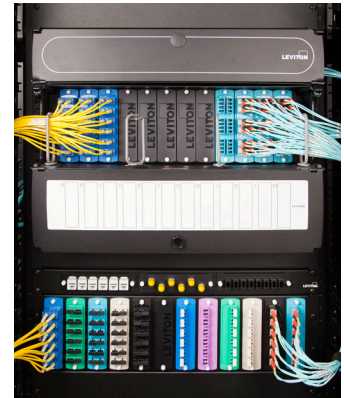
Ian Seaton, a data center consultant from Upsite Technologies, sees a strong correlation between white surface color and energy efficiency, stating there is evidence of 25-30% lighting energy savings. "If the lighting component represents 5-10% of the total data center energy budget, then a 30% lighting energy reduction equates to something like a 1.5 to 3% savings off the total data center energy usage."

Aesthetics — Finally, some data center managers just prefer the look of white, as it leaves the impression of a brighter, cleaner environment. It also brings a newer, fresher look compared to decades of traditional black. Aesthetics can play an important role in some data centers with areas that are more visible or used as a showcase for a company and their technologies. There is a desire for a cohesive white look that extends to walls, outside surfaces of aisles, overhead infrastructure, and the equipment inside of cabinets.

White Options from Leviton — In addition to Leviton's wide selection of black patch panels and fiber enclosures, Leviton also offers white options for select patch panels and fiber enclosures, including:

Opt-X 2000i SDX Enclosures

Cat 6 110 Style

QuickPort Flat and Angled Panels, UTP and Shielded