

Nu Skin® Uses CPI Cabinets to Rejuvenate the Heart of its Business

As a billion-dollar enterprise in skin care and nutrition products, Nu Skin needed a data center that would keep pace with its continuously growing operation. The company's current data center was small, outdated and did not have the proper redundancy to back up the systems. IT managers at Nu Skin turned to Hunt Electric, a leading data/communication design build company. The Hunt Electric I.T.S./Data Communications Team was prepared to help them create a new data center environment fit for the company's bright outlook. After testing several cabinet options, it was clear that Chatsworth Products (CPI) offered the best solutions to lead Nu Skin into the future with a new state-of-the-art data center.



In March 2013, Nu Skin flipped the switch to turn on its new and improved data center, complete with CPI Cabinets, Cable Runway and accessories.

"We Took Our Time to do it Right"

One of the main challenges Nu Skin needed to address was inefficient cooling and the constant change in airflow dynamics. According to Darrin Guevara, I.T.S. Communication Division Manager for Hunt Electric, "Nu

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Darrin Guevara, I.T.S. Communication Division Manager for Hunt Electric



CPI's TeraFrame cabinets in Glacier White brighten Nu Skin's data center.

Skin's existing data center was undersized, undercooled and underpowered."

To resolve these issues, Nu Skin tested multiple cabinet platforms using its own equipment. After the trial, there were concerns with all of the cabinets, except for CPI's. "All in all, it was the options and performance of CPI Cabinets in the data center that made their decision," Guevara explained.

After deciding on a CPI Solution, the Hunt Electric I.T.S./Data Communication team began constructing a plan for Nu Skin's new data center. They selected CPI's F-Series and N-Series TeraFrame® Cabinets with Glacier White finish.

"Nu Skin wanted something that was aesthetically pleasing because it was essentially on display. The data center is behind locked doors, but they have a big glass window that showcases it, so they wanted something that was appealing to the eye," Guevara stated.



Hunt Electric's I.T.S./Data Communications Team works to layout CPI cabinets in Nu Skin's data center.

Additionally, they compared airflow abilities of CPI's N-Series and F-Series TeraFrame Cabinets, both of which feature CPI Passive Cooling® Solutions. The N-Series is optimized for side-breathing equipment, while the F-Series manages traditional front-to-back airflow.

The entire process was unique because the data center was completely laid out at a staging site, and cabinet rows were ordered complete. The data center cabinets were then built in Hunt Electric's prefabrication department.

"There was a lot involved in the design up front, so we took our time to do it right. It's the heart of the business," Guevara stated.

Customized Products Solve Customer Problems

A major contributor to the data center's inefficient airflow was the need to leave the cabinet doors open during server maintenance. To resolve this issue, the Hunt Electric I.T.S./Data Communications Team decided to use HotLok® grommets.

CPI then installed the HotLoks as part of a customized build. When the Hunt Electric I.T.S./Data Communication team received the order, the holes for the HotLoks were already punched in all of the doors at the height and location where they wanted them, saving time and money on installation. Now, the data center technicians at Nu Skin are able to patch in while the cabinet doors are still closed, thus not compromising the dynamics of the hot and cold aisles.

“ CPI did a great job coming up with options. ”

**Darrin Guevara, I.T.S. Communication Division Manager
for Hunt Electric**

"It solved the issue of them [Nu Skin] worrying about technicians going to a cabinet and having to open it to patch into the server," Guevara stated.

Additional challenges were solved by Guevara and his team during the redesign process.

For example, the angle of the fascia took several revisions. It was a big challenge because there was only 24 inches from the front of the cabinet to where it hit the Vertical Exhaust Duct. The data center design also required an 18-inch ladder rack system to support all of the cables. So depending on the angle of the fascia, it would push the ladder rack back and bump against the Vertical Exhaust Duct. Space was limited to only about 1/8 inch.

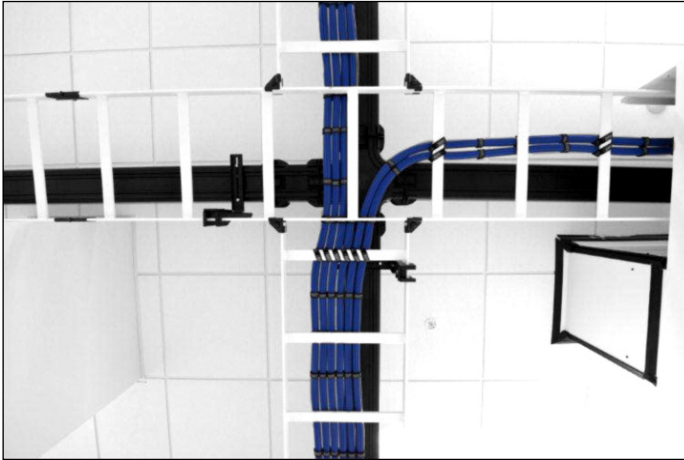
Nu Skin requested a custom fascia at the front of the cabinets to hide cabling located above the cabinets. CPI customized the fascia to achieve the right angle and create a system that worked within the space with all of the components needed.

The IT managers at Nu Skin also preferred that the screws on the front of the fascia not show, so Hunt Electric turned to CPI for more choices. CPI went back and forth with several design revisions. After four revisions the Hunt Electric I.T.S./Data Communications Team finally settled on a rivet option with a filler plate between the cabinets to conceal the rivets. "CPI did a great job coming up with options," stated Guevara.

Another part of the process that posed some complications was that Nu Skin had to have the data center delivered complete and running prior to the rest of the building being operational. The company kept permanent power, communication and utilities with all of the different service providers, while the rest of the building was still being constructed.

Productivity Increased and Downtime was Cut

After a year in design, overcoming several obstacles and investing a lot of time and hard work, Nu Skin's data center was complete.



Nu Skin used Glacier White Cable Runway for cable management to match the white cabinets and give it a seamless look.

There are 212 TeraFrame Cabinets with Vertical Exhaust Ducts on a raised floor, completely filling the 5,000 square foot (464.5 square meters) space.

Nu Skin also used CPI's Cable Runway in Glacier White to match the cabinets and other accessories.

Nu Skin's improved data center now averages 20kW per row, with potential of up to 50-100kW.

The data center also has plenty of room to grow. There is an additional 3,500 square feet (325 square meters) of space that is currently being used as a gym. Once the current data center is at full capacity, Nu Skin will order additional CPI Cabinets and Cable Management Products and use the existing power, cooling and communications connections that the Hunt Electric I.T.S./Data Communications Team installed.

About Chatsworth Products

Chatsworth Products (CPI) is a global manufacturer providing voice, data and security products and service solutions that optimize, store and secure technology equipment. CPI Products offer innovation, configurability, quality and value with a breadth of integrated system components, covering virtually all physical layer needs. Unequaled customer service and technical support, as well as a global network of industry-leading distributors, assures customers that CPI is dedicated to delivering products and services designed to meet their needs. Headquartered in the US, CPI operates global offices within the US, Mexico, Canada, China, the Middle East and the United Kingdom. CPI's manufacturing facilities are located in the US, Asia and Europe.

CPI is listed with the General Services Administration (GSA) under Federal Supply Schedule IT 70. Products are also available through GSA Advantage and through Government Wide Acquisition Contracts (GWACs), including GSA Connections and NITAAC-ECS III. (www.chatsworth.com/gov).

About Nu Skin

Established in 1984, Nu Skin is the premier anti-aging company committed to providing quality skin care and nutrition products. Headquartered in Provo, Utah, they have offices throughout North America, Latin America, Africa, Europe, Asia, South Pacific and the Middle East. For more information, visit www.nuskin.com.

About Hunt Electric, Inc.


Hunt Electric, Inc. has been providing industry leading services for various commercial, industrial, highway, healthcare, government, data centers, hospitality and institutional projects throughout the Intermountain West for more than 28 years. Hunt Electric is proud to serve as the region's most diversified electrical, infrastructure and data/communication contractor. For more information, visit www.HuntElectric.com.

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By using CPI's solutions, downtime was cut by 56 percent, productivity increased by 41 percent, and energy consumption decreased 23 percent. Reliability also increased from a Tier I DC to a Tier III DC.

“CPI was Very Flexible and Worked to Meet Our Needs”

If CPI had not been so flexible and timely, the Hunt Electric I.T.S./Data Communications Team never would have been able to complete the entire data center design within one year. “CPI definitely turned the products around quickly enough for us to make good decisions and be ahead of the schedule timeline,” Guevara stated. 

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