Data Center Deployment Options

Today’s data centers require adequate planning to address equipment hosting, power and thermal management needs. Once active equipment has been chosen, the next step is to make sure the data center design maximizes equipment availability and performance. These two parameters are directly linked to the service level agreements (SLAs) between data center managers and functional business units. The data center environment can have a huge affect on availability and performance. Designing all elements to work together helps properly support high active equipment performance.

Belden offers multiple levels of support for planning, design, ordering and installation of physical infrastructure solutions. The two most common:

Do-It-Yourself

Belden’s expertise and broad portfolio of enclosures, cabling, connectivity, cable management, airflow monitoring and management, and rack-level power monitoring and management offerings can work together to improve efficiency, reduce costs and keep up with increasing data center requirements. Solutions are available through Belden’s extensive network of distribution partners.

Data Center Ready

Belden can design, build and deliver customized enclosures that support and optimize the performance of active equipment. We help you create a custom solution that is ready to roll out onto the data center floor and removes all the guesswork from the design process. Your order ships from our factory with fiber, copper and accessories pre-installed to meet specific requirements.

Benefits at a Glance

Belden Data Center Ready solutions help data center designers, consultants, systems integrators, facility planners and managers design infrastructure to maximize the performance of active equipment.

Key Advantages

Reduce Deployment Time and Costs

• Pre-configured and labeled enclosures arrive at their location ready to receive servers or switches.
• Best-in-class pre-terminated fiber and copper systems, smart power distribution units (PDUs) and active heat containment allow for fast deployment and reduced labor costs.

Streamline Logistics

• Simplified ordering with one part number.
• Designs can be templated, saved, duplicated and modified for future use.

Deploy Green Data Centers

• Eliminate the need for individual packaging, reducing disposal of cartons, boxes and plastics.
• Consolidated shipping allows efficient packaging and reduces carbon footprints.
A Collaborative Ordering Approach

STEP 1: With the understanding of client requirements, a Belden engineer creates a Data Center Ready template that defines:

- Active equipment being supported
- Data center guidelines for expected operational certainty and infrastructure performance, as well as uptime and efficiency

STEP 2: A Belden engineer recommends:

- An enclosure series (considering depth, height, cable management, security, capacity and scalability)
- A pre-terminated fiber or copper cabling and connectivity system (considering density and performance versus airflow and management needs)
- PDUs (considering current and future planning, power monitoring, security and switching needs)
- Airflow management, heat containment and monitoring equipment (considering power, thermal and space requirements, and validation of any airflow obstruction)
- Cable management options (considering custom-length power and patch cords, zero-U vertical patching and optimization for server [blade] deployment)
- Other accessories, such as advanced cabinet security and monitoring
- Unit placement within the enclosure

STEP 3: The design and adjoining bill of materials are delivered

STEP 4: Once the design is approved and ordered, the units are manufactured to the agreed-upon specifications

STEP 5: Each unit is identified with a number that relates to a specific data center position and assigned a serial number that will track the original build

STEP 6: The delivery truck is loaded in a logical order to ensure efficient delivery and deployment upon arrival

STEP 7: Designs are stored for future customization and/or deployment