

Solutions for data centers

Advanced connector solutions

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DATA CENTER SOLUTIONS

Powering the green data center revolution

As a leading provider of electrical connectors, our wide product range is the number one choice for solutions to fit your particular needs.





The need for uninterrupted power

Key to ensuring the reliability of a data center is in its power supply. According to the most recent Uptime Institute data center survey, 78% of organizations reported an outage in the last three years. Thereof one third was categorized as significant to severe with substantial financial losses. 37% of those

outages were caused by issues with the on-site power system¹⁾. There are solutions that can be implemented to avoid such issues. Stäubli is an expert in advanced connection solutions. As a long-standing partner of the ICT industry, we fully understand our customer's problems and expectations, be it maximizing uptime and reliability, or en-

suring energy efficiency and minimal heat rise. We provide an optimal and adapted response for all aspects of data center management, including power equipment, power distribution, battery backup, and many more.

¹⁾ Ascierio, R., & Lawrence, A. (2020). Uptime Institute global data center survey. Seattle, WA: Uptime Institute. <https://uptimeinstitute.com/resources/asset/2020-data-center-industry-survey>

THE WORLD OF COMBITAC

Plug into reliability

Benefits at a glance

- Modular connector solutions for optimal and long lasting performance.
- Adapt to exact dimensional specifications and minimize design costs.
- Reduce maintenance time to absolute minimum through fast and user friendly assembly and replacement of parts.
- Adapt and expand existing CombiTac to future needs by adding further contact types.
- Guaranteed user safety through use advanced safety features.
- Value added services such as cable assemblies and product certification.
- CombiTac modular connectors are designed to ensure reliable and long lasting performance in applications where maintenance costs and downtime must be kept to the absolute minimum.
- Featuring high quality long life components, the modular design of CombiTac allows you to combine numerous connection types for panel mount installations or within an ergonomic designed housing.
- Depending on your exact needs, two CombiTac modular connector types are available, CombiTac uniq and CombiTac direct.
- Both products can easily be configured individually online through the award winning CombiTac configurator and supplied completely assembled including cable assembly.



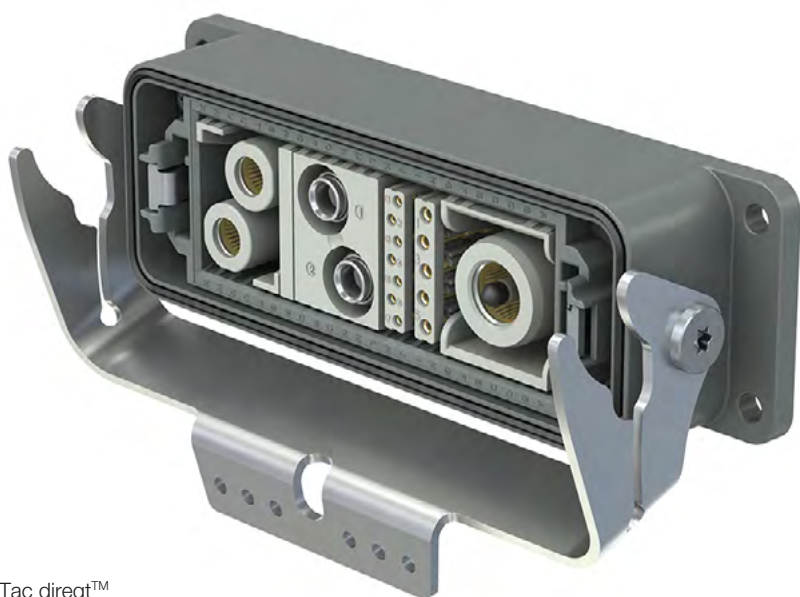
CombiTac uniq™

CombiTac uniq is 100% customizable to ensure your exact dimensional and connection type specifications are met without limitations. In addition, the modular design allows you to further expand your existing uniq configuration by adding further components.

Featuring an extensive range of connection types up to 100,000 mating cycles, CombiTac uniq allows you to combine various power contact types including power up to 300 A with IP2X protection on both

male and female parts, leakage free fluid couplings for cooling purposes, and dedicated monitoring contacts that allow you to remotely monitor whether your CombiTac is connector or not.

Further contact types include high density signal, data up to 10 Gbit, fiberoptic and pneumatic.



CombiTac direct™

CombiTac direct is the latest generation of connectors for manual and automatic connections with up to 10,000 mating cycles. Along with a light and modern design, CombiTac direct is also characterized by its tool-free click-and-connect feature. Ideal for applications where changeover of parts must be achieved within a very short time period, CombiTac direct allows you to manually assemble and insert all components such as contacts and carriers without the use of tools.

The modular connector system allows you to combine power contacts up to 350 A which also provide IP2X protection on both male and female parts, signal and monitoring contacts, along with leakage free pneumatic couplings.



Designed to perform

Stäubli offers a wide range of connector solutions for data centers that achieve the highest reliability through their design and use of the MULTILAM advanced contact technology. Stäubli round connectors are used for safe and stable power distribution between equipment.



MULTILAM technology

The specially shaped contact band provides multiple contact points, reducing the possibility of failure. It also allows for lower contact resistance, lower heat generation and ultimately less need for cooling. These features are particularly significant for data centers where cooling can account for a high percentage of energy consumption.



Busbar connections

Fork connectors are the most commonly used type of connectors in rack applications. To maximize flexibility, there are a range of busbar connector options with customizable solutions to fit all power requirements. For example, our standard GSR is available insulated and uninsulated, for power levels up to 250 A/600 V. For higher power densities of up to 1490 A/600 V, GSRD may be more suitable. Furthermore, our expert engineering team can design and build custom forks for your specific requirements.



Uninsulated single pole connectors

Alongside our fork connectors, Stäubli recommends connectors for power distribution in data centers and equipment. The single pole round connector line is available uninsulated in various shapes and termination options. It is suitable for grounding the metal housing of rack enclosures, and can be customized to meet your needs.



Insulated single pole connectors

Our Ø 10 - 21 mm insulated round connectors provide high safety features and are thus especially dedicated for high requirements purposes in low voltage areas. Color and mechanical coding provide high safety and reduce any risk of wrong connection. Depending on the rated current, three models are available: 10BV up to 250 A, 16BL up to 630 A, 21BV up to 1,000 A. They are recommended for power distribution between data center power equipment and can also be used for interconnection of modular data center containers.

PDU:

- GSR forks for busbar connections
- Uninsulated single pole connectors for grounding
- Insulated single pole connectors for power input/outlet

Busways:

- GSR forks for connection of busway joints, and tab off modules

Server rack:

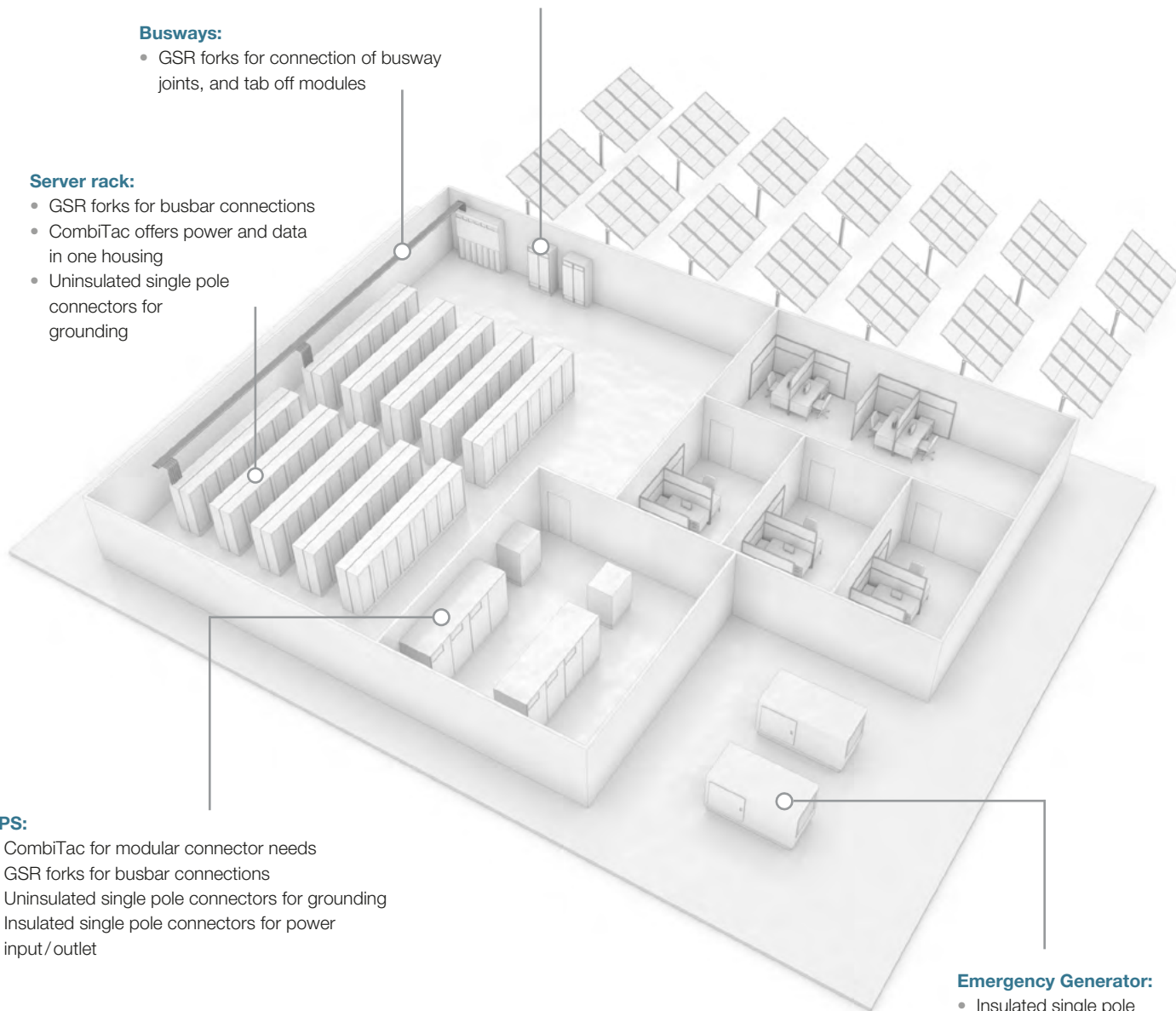
- GSR forks for busbar connections
- CombiTac offers power and data in one housing
- Uninsulated single pole connectors for grounding

UPS:

- CombiTac for modular connector needs
- GSR forks for busbar connections
- Uninsulated single pole connectors for grounding
- Insulated single pole connectors for power input/outlet

Emergency Generator:

- Insulated single pole connectors for power distribution to data center equipment





● Stäubli Units ○ Representatives/Agents

Global presence of the Stäubli Group

www.staubli.com