



TRANSPORTATION

APPLICATION EXAMPLE

## Universal subrack solution for use in railway technology

In close cooperation with its customer – a supplier of electronics in railway technology – HEITEC developed a universally usable housing and system solution for a variety of applications in trains. Thanks to its modular design, the solution can be flexibly adapted to any type of application and permits a simple built-to-order configuration.

To provide the most versatile system possible for the application, a decision was made to combine the HeiPac Vario universal subrack system with specific special components.

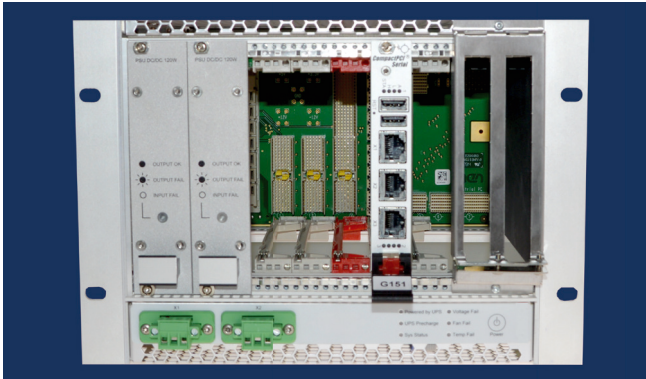
In terms of width, the customer purposely chose a 40HP version of the subrack system to enable the side-by-side installation of two subracks in a 19" cabinet. Consequently, HEITEC specially designed a 19" connection kit specifically adapted to the subrack that allows two systems to be mounted directly adjacent to one another. Naturally, it is also possible to install only one 40 HP subrack in a 19" cabinet. A 19" adapter kit specially developed for this purpose permits the easy installation of the subrack in the cabinet. The subrack is also available for wall mounting. HEITEC developed a corresponding guide rail to fit

the subrack that accommodates 4.4" drive modules and a CPCI Hybrid backplane. In addition to two PSU slots, the backplane also has CPCI, CPCI Serial, and conventional PCI slots, once again demonstrating the versatility of the system. Another special feature of the backplane is the customer-specific system management interface.

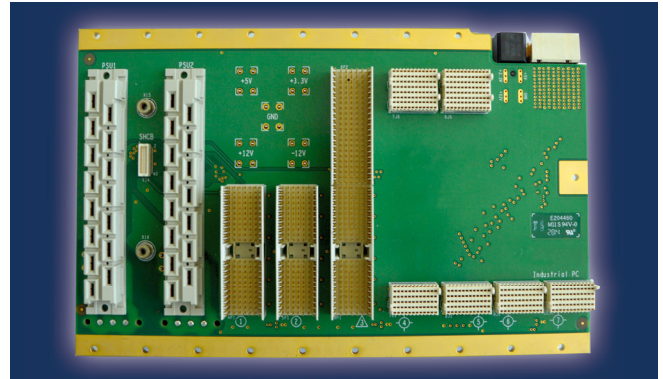
In the relevant railway applications, but also for applications in industry, the internal extensions can vary greatly and thus, also, the amount of heat generated. To permit a flexible response, the subrack was equipped with an optional fan kit with different performance classes that can handle temperatures from -20°C to +70°C depending on the device configuration.

For this compact and versatile system, a customized logistics concept was offered that allows the customer to take optimal advantage of the flexibility of the system. As requested, the delivered product was adapted to specific requirements to make it easier for the customer to perform the required end configuration.

## Flexible subrack system



Front view of subrack with view of special ventilation concept



Customer-specific CPCI Hybrid backplane with PSU, CPCI, and CPCI Serial, and adapter kit for PCI slots

## Technical Summary

- > HeiPac subrack combined with customer-specific components
- > CPCI Hybrid backplane (PSU, CPCI, CPCI Serial, and conventional PCI slots used with adapter kit)
- > D x W x H: 240 mm x 40HP x 4U
- > Optional fan kit with two fans in a customized configuration depending on performance class required (temperature range from -20°C to +70°C)
- > Optional 19" connection kit
- > Optional 19" adapter kit

## Customer Benefits

- > Variable subrack solution for a variety of applications
- > Compact subrack with specific expansion options
- > Versatile ventilation concept with fan kits of various performance classes depending on device configuration
- > Integration of a customer-specific system management interface on the backplane
- > Variety of installation options
- > Logistics concept specially designed for the customer with variable delivered versions
- > Economical system solution

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