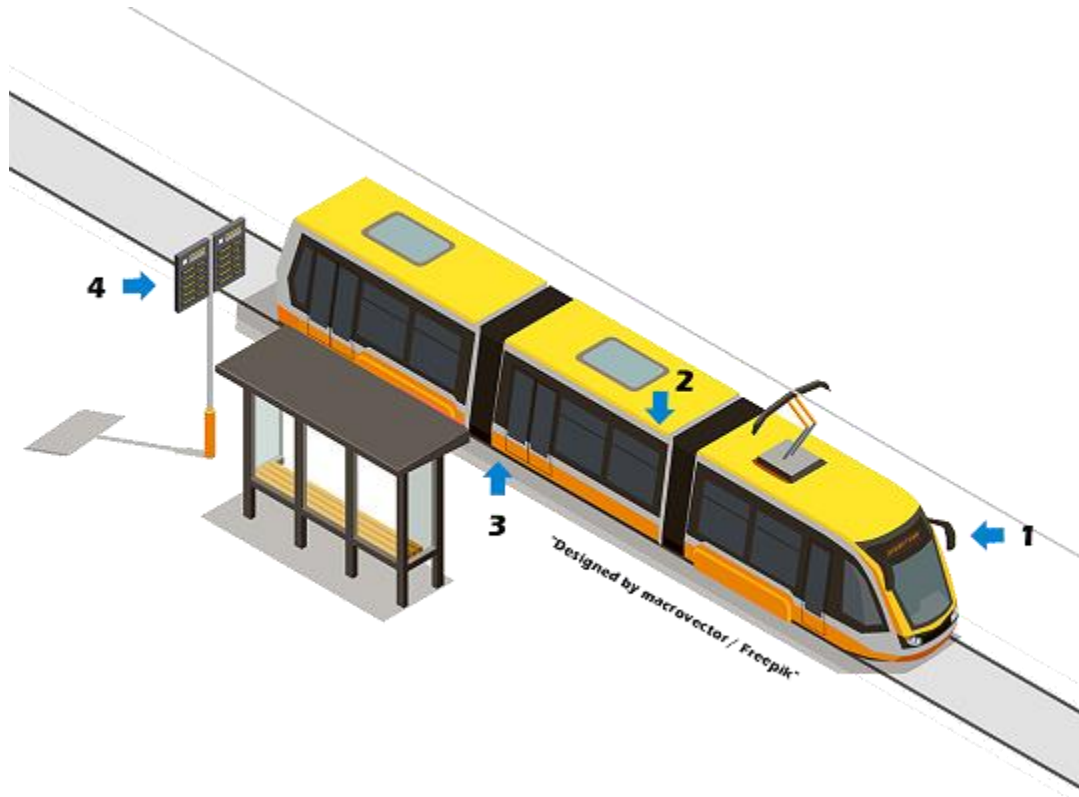


How to select a railway DC/DC converter for your system

In order to choose the right DC-DC converter for railway applications, the following are the common applications on the railway system.



1.Cockpit (Pilot cabin):

- a. Central computer system
- b. Electronic monitor display
- c. Information system
- d. Broadcast system

2.Passenger cabin:

- a. Electronics monitor display

- b.Cabin door control
- c.Alert system
- d.HVAC system

3.Propulsion system:

- a.Traction control system
- b.Sensor control system

4.Rail track system:

- a.Signal control system
- b.Safety system
- c.Crossing system

Four quick steps to choose the railway DC-DC converter you need:

First is to confirm the right input range of your system needs. The railway system could switch among 24V, 28V, 36V, 48V, 72V, 96V, and 110V. Ensure the Vin range that covers the bottom and upper voltage needs.

Second, choose the needed output voltage, wattage, and calculate the power derating based on the operating temperature. The heat could be dissipated by standard-size heatsink or system baseplate.

Third, based on where to apply the DC-DC converter, consider the installation type of the DC-DC converter. If it is built into the system board together, the external circuitry for EMI noise filtering and hold-up time capacitors are needed. On the other hand, chassis mount or din-rail

solutions could be installed independently without the external circuitry because the filtering circuitry is already built in, and it dramatically saves the development time which may be caused by EMI issue.

Fourth, check the product datasheet for the needs of operating temperature, Insulation requirement, Shock& Vibration, EMC, Immunity test, fire & smoke test etc. These requirements are based on the EN 50155 mostly.

Lastly, evaluate the system performance with the DC-DC converter and make sure the requirements of EN 50155 are met.