



Tram



Metro



# DOOR CONTROL

## Intelligent reliability

The Tamware door controller TW-465 provides suitable solutions for controlling doors on trams and metros.

The TW-465 is a high-class door controller for controlling both electric and pneumatic door systems. It is provided with I/O ports for conventional wiring, as well as with two independent CAN bus interfaces. One of the CAN interfaces is galvanic isolated, and there are also a number of isolated I/O ports. The controller software can be modified to fulfill customer requirements for door control. The TW-465 has a wide operational temperature range (between -40 and +70 °C) and it has been designed according to the railway standard EN50155.

The software uses a closed loop electric motor control for reliable and smooth operation for electric doors, thus making the operation immune to environmental conditions, such as temperature or supply voltage variations.

Safe operation is ensured by advanced obstacle detection algorithms in conjunction with other safety equipment, such as sensitive edges on door leaves. A built-in safety relay mechanism can be used to prevent unintentional opening of the door while the vehicle is moving.

Condition of electric motor, limit switches, sensitive edges and solenoid are constantly monitored, and a malfunctioning device can be detected by the TW-465. A diagnostic LED indicates active error codes by a blinking pattern, which means that an error code can be read even without any diagnostic tools.

Additionally, Tamware provides a comprehensive diagnostics software TW-200 to support the use of the door controllers. With the diagnostic software more detailed information and performance of the door can be analyzed. For the TW-465 controller, there is also a remote diagnostic option for TW-200 on Android devices.

