

# Product snapshot

## RTP100

Energy Metering



HaslerRail's range of on-board electronics can be interconnected to equip your rail vehicles with a fully networked system for data recording, speed sensing, data and energy management and visualisation

## RTP100

### Programmable protection from electrical faults and supply excursions

HaslerRail's RTP100 is a multifunctional, programmable device used in AC and DC rail vehicles to monitor the traction supply parameters and to protect traction and auxiliary equipment from overcurrents, short-circuits or transient out-of-range supply voltages on the contact wire.

If any instantaneous measured values exceed the configured thresholds, output relays wired in series with the vehicle's main circuit breaker would initiate controlled opening of the breaker to maintain the safety of the vehicle and passengers or cargo load.

The RTP100 is equipped with four analogue inputs for interfacing a variety of sensors:

- Conventional voltage and current transformers
- AC or DC high voltage electronic sensors
- AC or DC low voltage sensors

RTP100 parameters and set points etc. are user-definable using a CODESYS IDE on a host computer. The custom application can then be downloaded to the device via the USB-A interface on the front panel.

Typical RTP100 applications are:

- Over/under-voltage protection (DC, 50 Hz and 16.7 Hz)
- Overcurrent and short-circuit protection (50 Hz and 16.7 Hz)
- Contact wire detection (AC/DC)
- Out of frequency monitoring and protection
- Electrical Transient Recording (Oscilloperturbography)

RTP100 can be delivered with other electrical safety components and solutions from the Sécheron Hasler range including AC and DC circuit breakers and voltage and current sensors.

#### Observed standards

EN 50155:2021	EN 61373
EN 50121	EN 45545
EN 50128*	EN 50129*

\* The RTP100's HW and SW architectures are certifiable to realise system-level safety functions with performance up to SIL2 (EN50129)



RTP100 front panel interfaces