

SIEMENS

Ingenuity for life

A train's reliable interfaces

Easy communication via MVB PC/104

siemens.com/mobility

Perfect communication and control solutions on the railway

The Train Control Network (TCN) ensures the data transmission within trains. The MVB PC/104 module is part of this network. As an interface module it is the low-priced standard solution and allows the connection of electronic controllers with PC/104 bus to the Multifunctional Vehicle Bus (MVB).

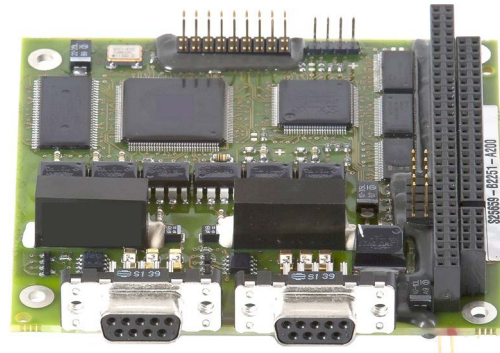
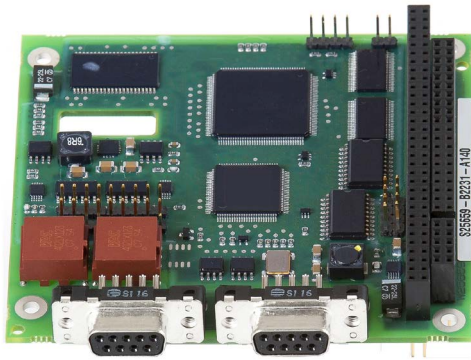
More than 100.000 modules are in use worldwide. Because of its multiple fields of application it is compatible with several TCN node classes 1.x and 2. Via the Application Programming Interface (API) the

module can be integrated into the TCN. The modules are mechanical and electrical designed in accordance with the PC/104 specification V2.1.

Matured technology

The device-internal parallel PC/104 bus is connected with the serial MV Bus to allow the flow of data. As the MV Bus PC/104 does not have its own processor the protocol stack for communication is to be provided on the host CPU. It works together with an adapter card in a computer or a computing device with an ISA bus or during the controller mode, e.g. with the assembly TCN GW (PC-mode) or the interface module AS 318 MVB with CPU C165 (165 mode).

Easy communication via MVB PC/104



PC/104 card for EMD

- **Use:** Electrical Middle Distance bus (EMD)
- **Address range:** Configurable
- **Modes:** PC-mode and 165 mode
- **Memory:** 512 Kbytes
PC-mode: Up to 256 Kbytes
165 mode: 256 Kbytes
- **Connection:** Subminiature D9 connector (2 x female)
- **Power Supply:** +5V +5 % 330mA (max 500mA for 200µs)
- **Size:** ~ 90 x 96 mm
- **Weight:** ~ 80g
- **Temperature:** -40°C - +85°C
- **Norm:** TCN Standard according to IEC61375
- **Baud rate:** 1.5MBAud

PC/104 card for ESD

- **Use:** Electrical Short Distance bus (ESD)
- **Address range:** Configurable
- **Modes:** PC-mode and 165 mode
- **Memory:** 512 Kbytes
PC-mode: Up to 256 Kbytes
165 mode: 256 Kbytes
- **Connection:** Subminiature D9 connector (2 x female)
- **Power Supply:** +5V +5 % 330mA (max 500mA for 200µs)
- **Size:** ~ 90 x 96 mm
- **Weight:** ~ 80g
- **Temperature:** -40°C - +85°C
- **Norm:** TCN Standard according to IEC61375
- **Baud rate:** 1.5MBAud

Further configurations for special use cases are available on request.

Published by
Siemens Mobility GmbH
38126 Braunschweig
Germany
siemens.com/mobility

This page contains a product overview for orientation purposes. Please refer to the respective data sheets for more information. Don't hesitate to get in touch.