

## R360 CabinetModule (truck, off-highway, railway)



Large mobile machines often have cabins for the operators. There are many signals in the area around the driver's workplace, e. g. from switches, joysticks or signal lamps. In order to connect these signals to the process control at a low cost, the signals are collected in a central module, preprocessed and transmitted to the

controller via CANopen.

The decentralised CAN module CR2016 provides the opportunity to use the inputs and outputs precisely in those positions in the cabin or in the operating panel where they are required. Thus wiring complexity is considerably reduced. Due to the parameter setting of the input and output functions, the module can be flexibly adapted to the corresponding application. The flat design is ideal for integration in dashboards, operating panels and control panels. The compact plastic housing provides all the necessary connections for the 16 inputs and 16 outputs and the communication. The connectors for mobile use can be locked and are reverse-polarity protected. The status LEDs for the inputs and outputs as well as the LEDs for power/communication and error are located behind a transparent service lid. Using the coding switches which are also located there, the node number and the baud rate can be directly set.

The module provides high flexibility due to the configuration of the inputs and outputs. There is a choice of analog and digital inputs. The function of the analog inputs can be set as current input 0 mA to 20 mA or as voltage input 0 V to 10 V and as ratiometric voltage input 0 V to 32 V. As regards the ratiometric input, the analog value is read without additional reference voltage, only by internally reading back the supply voltage. A fluctuation of the supply voltage has no influence on the measured value. The short-circuit and overload-protected outputs can be used as digital and PWM outputs. All input/output functions are configured from the user program via the object directory. Setting of the bit-rate and the node number is done via CANopen commands or via the integrated coding switches.

### R360 CabinetModule, CR2016

- Mechanical resistance to extreme shock
- Supply voltage 10 V<sub>DC</sub> to 32 V<sub>DC</sub>
- Load-dump resistance
- CAN interfaces with CANopen protocol for communication (CiA 401 V2.1, CiA 301 V4.02)
- 4 analog inputs, can also be configured as:
  - Analog input, voltage
  - Analog input, current
  - Digital input
- 4 digital inputs
- 4 digital inputs, can also be configured as:
  - Inputs for negativ signals
- 4 digital inputs, can also be configured as:
  - Frequency inputs
- 4 digital outputs (2 A), can also be configured as:
  - PWM output
- 12 digital outputs
- CE, e1 type approval, approval for railway applications (EN 50155)

## Contact

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## Features

<b>NMT</b>	NMT slave
<b>Error control</b>	Node guarding Life guarding Heartbeat producer
<b>Boot-up</b>	Yes
<b>Node ID range</b>	From 1 to 127
<b>Node ID</b>	Hardware switch Software switch Proprietary
<b>CANopen bit-rates</b>	20 kbit/s 50 kbit/s 125 kbit/s 250 kbit/s 500 kbit/s 800 kbit/s 1 000 kbit/s
<b>Type of bit-rate adjustment</b>	None
<b>RPDOs</b>	4
<b>TPDOs</b>	4
<b>PDO modes</b>	Event-triggered Triggered by event-timer Synchronous (cyclic)
<b>PDO linking</b>	Yes
<b>PDO mapping</b>	Variable
<b>SDO server</b>	1
<b>SDO client</b>	No
<b>Emergency producer</b>	Yes
<b>Emergency consumer</b>	4 messages
<b>Sync producer</b>	No

<b>Sync counter</b>	No
<b>Time stamp</b>	No
<b>Additional functions</b>	Self-starting device Program download
<b>CANopen version</b>	CiA 301 V 4.0.2
<b>Frameworks</b>	CiA 302
<b>Device profiles</b>	CiA 401: CANopen device profile for generic I/O modules
<b>Certified</b>	No
<b>Availability</b>	In stock