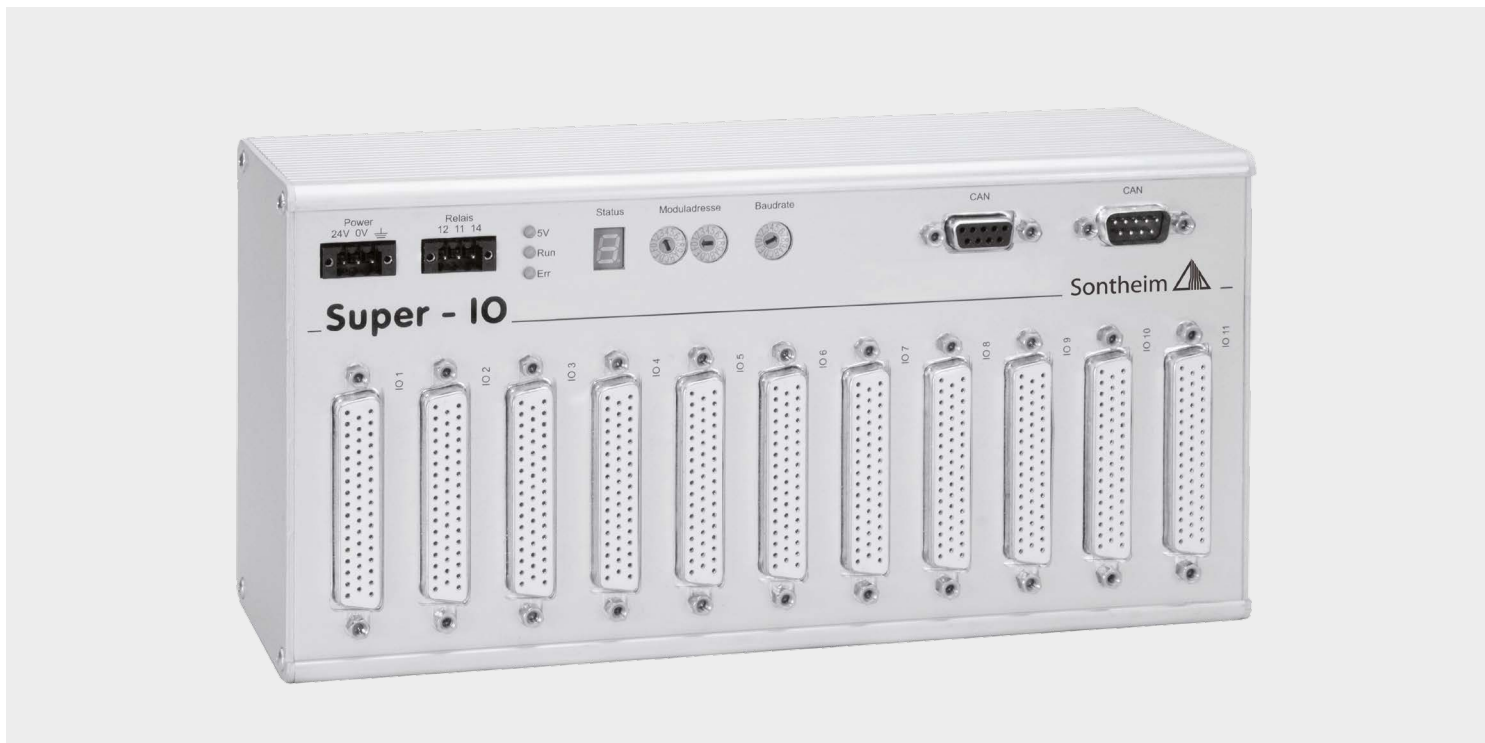


Super-IO

Small, flexible and powerful













Super-IO

Super-IO is a digital 24 V input and output module with 160 digital inputs and 192 digital outputs. It is optimally suited for the use in CAN networks. The device possesses the shortest conversion times and a high process reliability. That makes it the best choice for continuous operation in complex machine networks.

Key Features

- 
Safety features for high running safety
- 
Galv. isolated CAN interface acc. to ISO 11898
- 
Easy access to all interfaces
- 
Own intelligence for complex CAN networks
- 
All clamps pluggable and lockable
- 
Signal delay of less than 400 µs
- 
Galv. isolated inputs
- 
Compact aluminium housing with IP20 and integrated top hat rail mounting

Overview of interfaces

- 160 digital inputs, divided into 5 blocks of 32 channels
- 192 digital outputs, divided into 6 blocks of 32 channels

Housing and clamps

The compact housing is made of aluminium. It contains a top hat rail mount and a front cover with all interfaces for better overview in the control cabinet. The technician will note the convenience while working at the bus cabling. The module uses very robust clamps and cabling for the connection to sensors and actors. In order to maximize the resistivity against mechanical force, all clamps can be locked.

LEDs and switches

You can configure the baud rate and module address with HEX switches at the front cover – easy and comfortable. Moreover, there is a 7-segment display as well as some LEDs for showing the device status.

Technical Data

Hardware	
CPU	16-bit microcontroller
CAN	1x CAN acc. to ISO 11898, galvanically isolated; Connection with two RJ45 socket (bridged)
CAN protocol	DS 301 and 401
Setting	of module address via 2 HEX switches of baud rate via HEX switch
Connection system	D-Sub50 clamp, lockable
Operating system display	1x LED green (run) for operating mode 1x LED red (error) for error status 1x LED green (power) for supply voltage 1x 7-Segment display for module activities like Init, Pre-Operational, Operational and error
Dimensions (l×w×h)	240 mm × 125 mm × 90 mm
Protection class	IP20, EMC-requirements according to CE
Storage temperature	-30°C up to +70°C
Operating temperature	0°C up to +60°C
Humidity	90 % non-condensing
Power supply	24 V DC ±20 %

Signal processing and CAN interface

Besides its inputs and outputs the Super-IO offers a powerful microcontroller that handles data acquisition of sensors, control of actors and the processing of any CAN data. An important safety function is the guarding capability which is fully integrated into the IO for network surveillance. If there is an absence of guarding by the master registered, the module immediately goes into STOP-mode. The integrated CAN interface is designed in accordance to DS 301 and 401 for a flexible use in different places and tasks in the CAN bus network. All Sontheim CAN interfaces comply with ISO 11898.

Digital inputs	
Number of inputs	160
Switching level "1"	+15.0 V up to +28.8 V
Switching level "0"	0.0 V up to +8.0 V
Potential isolation	Optocoupler
Input current/input	11 mA
Sampling frequency (Fg)	5 kHz
Signal delay	< 100 µs

Digital outputs	
Number of outputs	192
Power	24 V DC ±20 %
Circuit type	FET-Highside switch
Potential isolation	Optocoupler
Output current/output	500 mA
Total current of the module	8 A
Sampling frequency	1 kHz

Customized adaptations

Quite often, the specific requirements of an automation process make it necessary to have an IO module meeting individual needs. This is particularly the case for the number and type of in- and outputs, the fieldbus, the current supply of the module and IO channels and many more details. It is our pleasure to adapt the module to your processes.

Order information

V966185000

Super-IO



Mobile Automation



Industrial Automation



Diagnostics



Connectivity

We are looking forward to your enquiry!

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