SIOS Peripherals
Remote STANGE I/O-System

SIOS is a flexibly configured remote CAN peripheral device, adaptable to application, intelligent and future proof.
A SIOS peripheral consists of at least one CAN gateway and one power module. The gateway and further I/O modules are powered by the first power module. SIOS modules consist of an I/O card and clamping module for wiring. Wiring takes place without tools via spring contacts. The modules are hot-swappable and can therefore be changed when energized. The interchanging of modules is impossible due to the mechanical coding.
There are SIOS gateways with different bus systems: SIOS-CAN as CAN bus systems and SIOS-TCPIP as an Ethernet bus system (in progress).
A node consists of a maximum of 64 modules. The maximum number of nodes is 99. Because of the large number of nodes and the maximum number of 64 modules, the complete CANopen protocol can be utilized fully. Up to 25,344 digital I/Os or analogue values can be used in the maximum configuration per network, limited to one type of module.

SIOS Features:
- Flexibly configured remote CAN peripheral device
- A peripheral consists of one CAN gateway and one power module
- Adjustment of desired digital/analogue I/Os by expandable I/O modules (maximum of 64 modules), consisting of I/O card and clamping module
- Spring-type terminal wiring
- Modules are hot-swappable and can therefore be changed when energized
- Interchanging of the I/O cards impossible due to mechanical coding
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<tr>
<th>Type</th>
<th>Module</th>
<th>Specification</th>
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| SIOS-CAN  | SIOS GATEWAY    | Flexibly usable with up to 64 modules  
Canopen protocol  
Baud rates: 20 kB, 50 kB, 100 kB, 125 kB, 250 kB, 500 kB, 1 MBaud  
Can connection, galvanically isolated  
Led state for CAN communication, IO field communication, energy supply  
Incl. power module SIOS PWRG  
Housing: 113 x 51 x 73 mm CAN gateway |
| SIOS-PWRG | Supply Module   | Internal power supply for modules  
Input voltage: 24 V DC (reverse polarity protected)  
Power supply of max. 20 modules (incl. power module)  
Modul options:  
- SIOS-PWRG (for gateway supply and the first 19 modules)  
- SIOS-PWR supply module (supply a further 20 modules incl. power module)  
Dimensions with module: 128 x 12.7 x 74 mm |
| SIOS-DI4  | 4 Digital Inputs| Input voltage: 5 ... 24 V for active level  
Input voltage with active level: approx. 3 mA  
Galvanically isolated to internal field (max. 500 V)  
(no separation of inputs among each other)  
Dimensions with module: 128 x 12.7 x 74 mm |
| SIOS-D04  | 4 Digital Outputs| Supply voltage outputs: 7 ... 24 V  
Output current: max. 700 mA  
Short-circuit proof outputs  
Galvanically isolated to internal field (max. 500 V)  
(no separation of outputs among each other)  
Dimensions with module: 128 x 12.7 x 74 mm |
| SIOS-DAC2 | 2 Analogue Outputs| Configurable as 0 - 10 V, 0 - 20 mA or 4 - 20 mA  
12 Bit resolution  
Output accuracy: better than 0.1% from the end of the range  
Current output: max. burden 500 Ohm  
Voltage output: min. burden 2 Kohm  
Galvanically isolated to internal field (max. 500 V)  
(no separation of outputs among each other)  
Dimensions with module: 128 x 12.7 x 74 mm |
| SIOS-IW1-XL| 1 Universal Analogue Input| Galvanically isolated to internal Bus (max. 500 V)  
Thermocouples, PT100, PT1000, potentiometer (max. 4 kΩ)  
18 Bit resolution  
Accuracy: better than 0.1% from the end of the range  
Measuring cycle per thermocouple or standard signal approx. 80 ms  
Dimensions with module: 154 x 12.7 x 74 mm |
| SIOS-IW2  | 2 Analogue Inputs (standard signal) | 0 - 10 V, 0 - 20 mA, 4 - 20 mA  
Accuracy: better than 0.1% from the end of the range  
Measuring cycle per input approx. 40 ms  
18 Bit resolution  
Galvanically isolated to internal Bus (max. 500 V)  
(no separation of inputs among each other)  
Dimensions with module: 128 x 12.7 x 74 mm |