

## **SIOS** Peripherals

Remote STANGE I/O-System



## SIOS STANGE Input/Output 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



Technical Data SIOS		
Туре	Module	Specification
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, 10 field comunication, energy supply Incl. power module SIOS PWRG Housing: 113 x 51 x 73 mm CAN gateway
SIOS-PWRG SIOS-PWR	Supply Module	Internal power supply for modules Input voltage: 24V DC (reverse polarity protected) Power supply of max. 16 modules (incl. power module) Modul options: - SIOS-PWRG (for gateway supply and the first 16 modules) - SIOS-PWR supply module (supply further 16 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-DO4	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 k $\Omega$ ) 18 Bit resolution Accuracy: better than 0.1% from the end of the range Measuring cycle per thermocouple or standard signal approx. 60ms 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