



Remote I/O System I.S. 1

- Modular remote I/O system for DIN rail mounting
- Installation in Zone 1 or Zone 2 / Div 2 or in the safe area
- Simple engineering through PowerBus
- Components: Bus rail, CPU & power module, various I/O modules
- Inputs and outputs intrinsically safe
- HART communication for transmitters and control valves with PC software
- Redundancy for field bus, CPU & power module
- Hot swap for all units
- Communication: Modbus, Profibus DP etc.
- ServiceBus for configuration, fault diagnosis, HART communication
- EMC tested, CE marking
- Flexible engineering of enclosures

STAHL

With I.S. 1 we are presenting in 1999 an additional remote I/O with I.S. inputs and outputs.

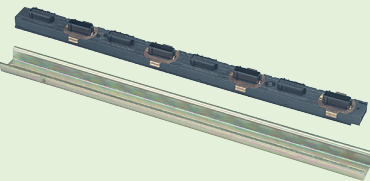
I.S. 1 is extremely simple in its use: a CPU & power module and, depending on requirements, several I/O modules are snapped onto the BusRail (35 mm DIN rail). The unique PowerBus power distribution system, developed especially for hazardous areas makes the engineering of the system as simple as for normal industrial I/O systems.

I.S. 1 is particularly flexible: suitable for systems with a small or large number of signals to be installed in either Zone 1, Zone 2 / Div 2 or in the safe area. An intrinsically safe field bus in copper or fiber optic technology ensures the connection to the automation system. Additional features: integrated HART communication; redundancy; enclosures according to your requirements.

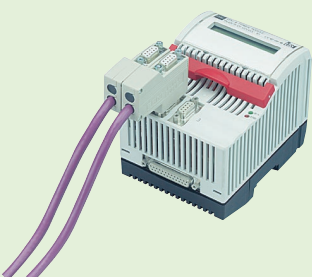
I.S. 1 is very economical: modules with 8 or 16 channels lower the price per signal. The ServiceBus, in connection with the I.S. 1 Explorer shorten the time for commissioning and troubleshooting.

Zone 1 and Zone 2

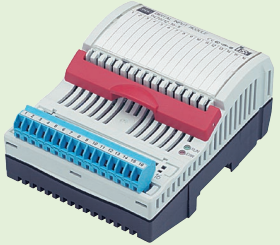
BusRail type 9494 for the electrical cross-linking of the modules with each other (data, power supply)

	Version	Length	Ordering number
	for 4 modules	approx. 400 mm	9494/...
	for 2 modules on the left	approx. 200 mm	9494/...
	for 2 modules on the right	approx. 200 mm	9494/...
Certifications		PTB, FM in preparation	

CPU & power module Type 9440 Field bus interface and power supply

	Configuration	Installation in	Power supply	Ordering number
	Modbus RTU, Profibus DP	Zone 2 / Div 2	24 V DC	9440/15-01-11
	Modbus RTU, Profibus DP	Zone 2 / Div 2	100 .. 250 V AC	in preparation
	Modbus RTU, Profibus DP	Zone 1	24 V DC	in preparation
	Modbus RTU, Profibus DP	Zone 1	100 .. 250 V AC	in preparation
	Other field busses			
Certifications Modbus RTU Profibus DP ServiceBus System expansion Optional		PTB, FM in preparation RS 485, 38.4 kBit/s RS 485, 1.5 MBit/s PC software I.S. 1 Explorer PC software for HART max. 32 I/O modules CPU & power module redundant		

I/O module types 94.. Input and output of process signals

	Configuration	Signal	Input / output	Channels	Ordering number
	Analog input module	0/4 .. 20 mA	I.S.	8	9460/12-08-11
	HART analog input module	4 .. 20 mA	I.S.	8	9461/12-08-11
	Temperature input module	J, K, B, E, R, S, T	I.S.	8	9481/12-08-11
	Temperature input module	Pt 100, Ni 100	I.S.	8	9480/12-08-11
	NAMUR digital input module	< 1.2 mA / > 2.1 mA	I.S.	16	9470/12-08-11
	Digital input module 24 V	< 10 V / > 14 V	non I.S.	16	in preparation
	Analog output module	0/4 .. 20 mA	I.S.	8	9465/12-08-11
	Analog output module HART	4 .. 20 mA	I.S.	8	9466/12-08-11
	Digital output module	e.g. 12.5 V / 45 mA	I.S.	4	9475/12-04-.1
	Digital output module	e.g. 13 V / 30 mA	I.S.	8	9475/12-08-.1
	Digital output module	Switching capacity 24 V / 2 A	non I.S.	8	in preparation
	Certifications Input / output resolution Input/output monitoring Display module status Additional functions Galvanic isolation		PTB, FM in preparation Installation in Zone 1 or Zone 2 / Div 2 16 / 12 bit Open circuit and short circuit Green LED "RUN" and red LED "ERR" Adjustable parameters Inputs/outputs to system bus and power supply		

