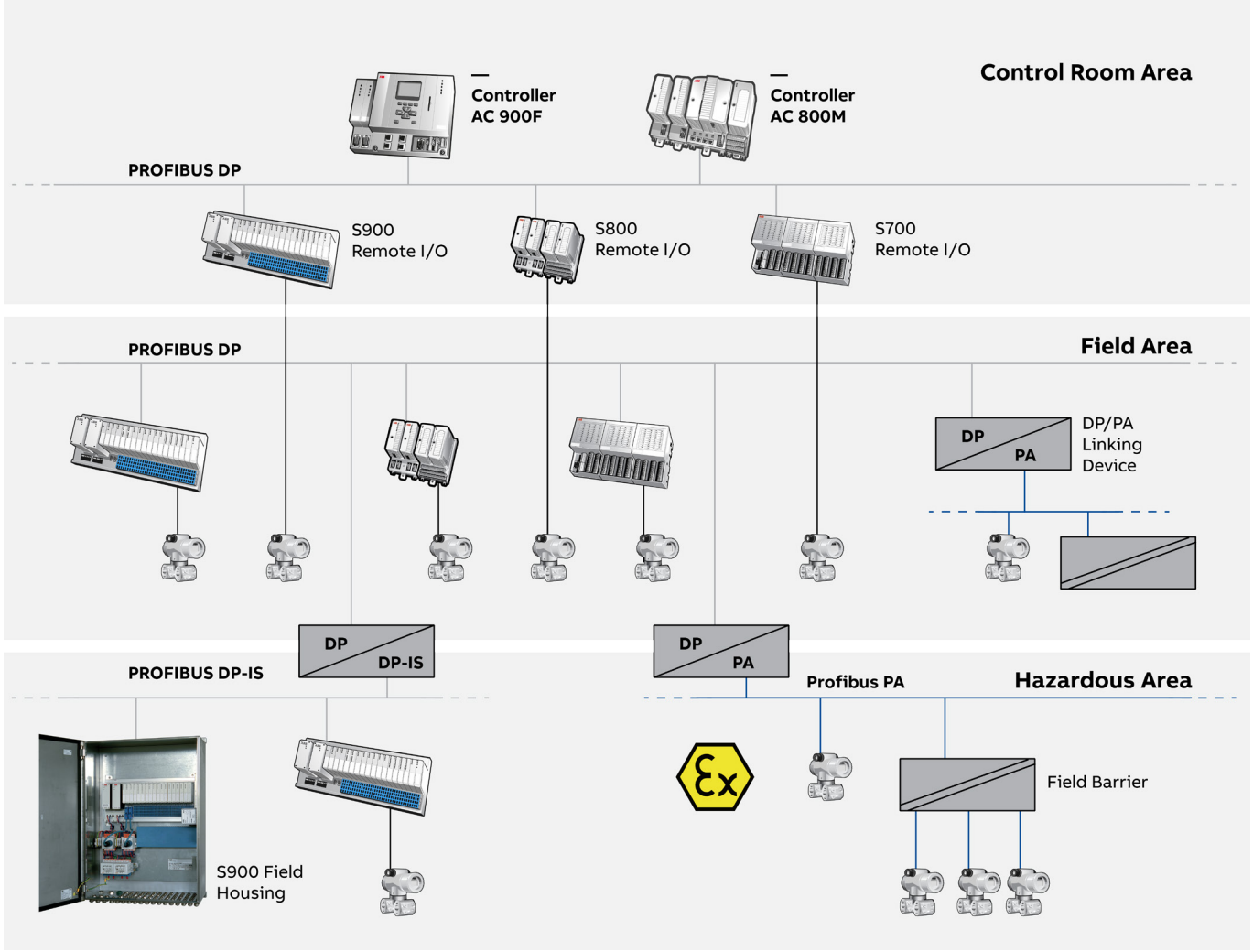
S900 Remote I/O System

Intrinsic safety in the field





Advantages at a glance

- Designed for intrinsically safe applications in hazardous areas
- Integrated barrier function with hot pluggable modules and automatic slot addressing
- High availability due to redundancy in the power supply as well as in communication
- Minimum maintenance effort as a result of hot swap capability in rated hazardous areas, self-diagnostics, remote engineering capabilities
- Simplified project handling with pre-installed, fully certified extended safety field housings
- Easy project planning and efficient engineering

Customer benefits

- Installation close to production cell saves cabling cost
- Responsibility for explosion protection taken over by vendor (pre-mounted for installation in field housings including ATEX certification for Zone 1)
- No plant-specific documentation and engineering required
- Simplified Ex-acceptance test procedure for plants used in hazardous areas (pre-mounted field house including ATEX certification Zone 1)
- Straightforward preparation of offers

	NAMUR inputs	Binary 48 V	Binary Relay	Analog Unipolar	Temperature RTD	Temperature T/C	HART	Intrinsic safety
I/O Features S900								
Digital I/O modules								
DX910S,B,N*	☑							S,B
Digital output modules								
DO910S,B,N*								S,B
DO930N		☑						
Pulse input modules								
DP910S,B,N*			☑					S,B
Analog input modules								
AI910S,B,N*				☑				S,B
AI930S,B,N*				☑			☑	S,B
AI931S,B,N*				☑			☑	S,B
AI950S,B,N*					☑	☑		S,B
Analog output modules								
AO910S,B,N*				☑				S,B
AO920S,B,N*				☑				S,B
AO930S,B,N*				☑			☑	S,B

* For details about S900 I/O please refer to the S900 catalog, document number 3BDD010420.

07. Analog input, HART, AI930S/B/N
- Power supply for 4...20 mA loop powered 2-wire transmitters
- Short and break detection
- Electrical isolation between input / bus and input / power
- Common return for all inputs
- 4 channels
- Cyclic secondary HART variables
- Transmission of HART frames via the fieldbus

08. Analog input, HART, pass., AI931S/B/N
- Passive inputs for 0/4...20 mA
- Short and break detection
- Electrical isolation between input/bus and input/power
- Common return for all inputs
- 4 channels
- Cyclic secondary HART variables
- Transmission of HART frames via the fieldbus

09. Temperature input AI950S/B/N
- Pt 100, Pt 1000, Ni 100, 0...3 kOhm in 2-/3-/4-wire connection
- Thermocouple Type B, E, J, K, L, N, R, S, T , U , mV
- Internal or external cold junction compensation
- Short and break detection
- Electrical isolation between input/bus and input/power
- Electrical isolation channel to channel
- 4 channels

10. Analog output AO910S/B/N
- Output signal 0/4...20 mA for actuators
- Short and break detection
- Electrical isolation between output / bus and output / power
- Output with common ground
- 4 channels

11. Analog output, isolated AO920S/B/N
- Output signal 0/4...20 mA for actuators
- Short and break detection
- Electrical isolation between output / bus and output / power
- Electrical isolation channel to channel
- 4 channels

12. Analog output, HART, AO930S/B/N
- Output signal 0/4...20 mA for actuators
- Short and break detection
- Electrical isolation between output / bus and output / power
- Output with common ground
- 4 channels
- Cyclic secondary HART variables
- Transmission of HART frames via the fieldbus

For further information please contact your local ABB representative or visit our web:
https://new.abb.com/control-systems/system-800xa/800xa-dcs/hardware-controllers-io/s900-i-o

07 08 09 10 11 12

