

AI950B (TI4-B)

ABB Ability™ System 800xA® hardware selector



The remote S900 I/O system can be installed in non-hazardous areas or directly in Zone 1 or Zone 2 hazardous area depending on the selected system variant. S900 I/O communicates with the control system level using the PROFIBUS DP standard. The I/O system can be installed directly in the field, therefore the costs for marshalling and wiring are reduced.

The system is sturdy, error-tolerant and easy to service. Integrated disconnection mechanisms allow replacement during operation, meaning that there is no need to interrupt the primary voltage in order to exchange the power supply units.

S900 I/O type B. For installation in hazardous area Zone 2. For connecting intrinsically safe field devices installed in Zone 2, Zone 1 or Zone 0.

AI950B Temperature Input (TI4-B), supporting Pt100, Pt1000 and Ni100 in 2-/3-/4- technology. Thermocouples B, E, J, K, L, N, R, S, T, U, mV. Isolated inputs channel by channel.

Features and benefits

- ATEX Certification for Zone 2
- Redundancy (Power and Communication)
- Hot Configuration in Run
- Hot Swap functionality
- Extended Diagnostic
- Excellent configuration and diagnostics via FDT/DTM
- G3 – coating for all components
- Simplified maintenance with auto-diagnostics
- Pt 100, Pt 1000, Ni 100, 0...3kOhms in 2/3/4 wire technique
- 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

General info

Article number	3KDE175522L9500
Type	Analog Input
Number of channels	4
HART	Yes
SOE	N/A
Redundancy	No
Intrinsic safety	Yes
Mechanics	S900

Environment and certification

CE mark	Yes
Hazardous Location	ATEX Zone 2
Corrosive atmosphere ISA-S71.04	G3
Climatic operating conditions	Relative humidity max. 93 % +/- 3 % at 40°C
Max ambient temperature	-20 °C...60 °C
RoHS compliance	DIRECTIVE/2011/65/EU (EN 50581:2012)
WEEE compliance	DIRECTIVE/2012/19/EU
WEEE category	Small Equipment (No External Dimension More Than 50 cm)

Dimensions

Width	20 mm (0.79 in.)
Depth	104 mm (4.09 in.)
Height	104 mm (4.09 in.)
Weight	0.135 kg (0.30 lbs.)

solutions.abb/800xA
solutions.abb/controlsystems

800xA and Symphony Plus is a registered trademark of ABB. All rights to other trademarks reside with their respective owners.

We reserve the right to make technical changes to the products or modify the contents of this document without prior notice. With regard to purchase orders, the agreed particulars shall prevail. ABB does not assume any responsibility for any errors or incomplete information in this document.

We reserve all rights to this document and the items and images it contains. The reproduction, disclosure to third parties or the use of the content of this document – including parts thereof – are prohibited without ABB's prior written permission.

Copyright© 2025 ABB All rights reserved