

Foxboro - I/A Series / EcoStruxure Foxboro DCS

FBM216B

Redundant Eight-Channel Isolated HART Analog Input Module

Verified product identity

The official document styles the function as FBM216b; RH927AJ is the current module part number, P0927AJ is superseded, and RH924DT is the separate redundant adapter.

Verified specifications

Analog input channels	8, independent and isolated
Redundancy	Master/tracker module pair
Channel mix	Any mix of standard 4-20 mA and HART devices
HART protocol	Versions 5, 6 and 7
HART communications	Point-to-point master/slave, asynchronous half-duplex, 1200 baud
HART message rate	2 messages per second; burst mode not supported
Maximum HART distance	Up to 3,030 m subject to HART physical-layer and loop limits
Transmitter compliance	18.5 VDC minimum at 20.5 mA
Sense resistor	280 Ω $\pm$ 0.02%
Input impedance	282 Ω with external power; 302 Ω with internal power
Analog accuracy	$\pm$ 0.075% of full scale
Temperature coefficient	50 ppm/ $^{\circ}$ C
Input resolution	15 bits
Update / integration	100 ms update; 500 ms integration
Common-mode rejection	>100 dB
Normal-mode rejection	>35 dB

Selection summary

Foxboro FBM216B is a redundant eight-channel isolated analog input module supporting mixed standard 4-20 mA and HART transmitters in Foxboro DCS systems.

APTER POWER

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Additional verified specifications

Current limit	Below 37 mA single; below 72 mA redundant
Required redundant adapter	RH924DT
System software	I/A Series v8.2-v8.8 or Control Core Services v9 or later
Power consumption	7 W maximum
Heat dissipation	4 W maximum
Module Fieldbus	Redundant 2 Mbps
Input power	24 VDC +5%, -10%
Operating temperature	-20 to +70°C
Storage temperature	-40 to +70°C
Relative humidity	5 to 95%, noncondensing
Operating altitude	-300 to +3,000 m
Storage altitude	-300 to +12,000 m
Vibration	0.75 g from 5 to 500 Hz
Contamination class	ISA-S71.04 Class G3
Dimensions (W × H × D)	4.5 × 10.2 × 14.0 cm
Weight	0.284 kg

Installation and commissioning

- Use RH924DT and verify the project-specified termination assembly, cable, power method and software compatibility.
- Preserve the saved channel configuration, field wiring, grounding and diagnostics before removal.
- Commission every used channel with traceable signals and verify alarms and control behavior.

Official applications

- Redundant HART transmitter input acquisition
- Standard 4-20 mA analog transmitter acquisition
- HART device data and diagnostics through Field Device Expert

Evidence boundary

Dimensions and weight apply to the FBM216B electronic module. Termination assemblies, cables, redundant companion modules and packaging are excluded.

Source basis: current official Schneider Electric / Foxboro model-specific Product Specifications Sheet.