

B&R - X20 System**X20AI4632**

High-Speed Analog Input Module

Technical specifications

Analog inputs	4 differential inputs
Input ranges	± 10 V or 0 to 20 mA
Digital converter resolution	Voltage ± 15 -bit; current 15-bit
Conversion time	50 μ s for all inputs
Conversion behavior	Simultaneous input conversion
Conversion procedure	SAR
Voltage input impedance	20 M Ω
Current input load	Less than 400 Ω
Permissible input signal	Maximum ± 30 V or ± 50 mA
Input filter	Third-order low-pass, 10 kHz cutoff
Common-mode range	± 12 V
Electrical isolation	Channel isolated from bus; channels not isolated from one another
Required terminal block	X20TB12, ordered separately
Compatible bus modules	X20BM11 or X20BM15, ordered separately

Documented role

B&R X20AI4632 is a four-channel high-speed analog input module for ± 10 V or 0 to 20 mA signals with simultaneous 16-bit conversion for the X20 System.

Documented applications

- Four-channel high-speed ± 10 V feedback acquisition
- Fast 0 to 20 mA process-signal measurement
- Simultaneous multi-axis or multi-sensor analog capture in X20 stations

Selection and installation checks

X20AI4632 simultaneously converts four channels in 50 microseconds; verify signal-specific terminals, loop power, common-mode range, 10 kHz filtering, scaling, X20TB12, and controller-task timing before replacement.