

B&R - X20 System

X20AI4622

Analog Input Module

Technical specifications

Analog inputs	4 differential inputs
Input ranges	± 10 V; 0 to 20 mA; 4 to 20 mA
Signal selection	Different terminal connections; channel type selected in software
Digital converter resolution	Voltage ± 12 -bit; current 12-bit
Conversion time	400 μ s for all inputs
Conversion procedure	SAR
Voltage input impedance	20 M Ω
Current input load	<400 Ω
Permissible input signal	Maximum ± 30 V or ± 50 mA
Input filter	Third-order low-pass; 1 kHz cutoff
Common-mode range	± 12 V
Overload digital value	Configurable
Electrical isolation	Channel isolated from bus; channels not isolated from one another
Insulation voltage	500 Veff between channel and bus

Documented role

B&R X20AI4622 is a four-channel analog input module for ± 10 V, 0 to 20 mA, or 4 to 20 mA signals with differential inputs for the X20 System.

Documented applications

- Acquiring ± 10 V analog signals in X20 machine-control stations
- Measuring 0 to 20 mA or 4 to 20 mA process signals
- Distributed analog measurement connected to standard fieldbus control systems

Selection and installation checks

X20AI4622 uses different terminals for voltage and current signals; verify each channel's wiring and software type, external transmitter power, scaling, common-mode range, X20TB12, and X20BM11 or X20BM15 before replacement.