

INDUSTRIAL AUTOMATION PRODUCT

X20AI4222

Four-Channel +/-10 V Analog Input Module

B&R X20AI4222 is a four-channel +/-10 v analog input module for the documented X20 System installation.

CONTROLLED ENGINEERING COPY

IDENTITY	VERIFIED VALUE
Manufacturer	B&R
System family	X20 System
Part number	X20AI4222
Document status	Controlled product and system reference

DOCUMENT SCOPE

Exact article identity, official technical data, host matching, installation checks, applications, precautions and controlled acceptance evidence.

MODEL-SPECIFIC ENGINEERING NOTE

Confirm B&R X20AI4222, X20 I/O station, four +/-10 V differential inputs and X20TB12, wiring, grounding, configuration, companion accessories and controlled commissioning results before service release.

System Role and Architecture

B&R X20AI4222 is a four-channel +/-10 v analog input module for the documented X20 System installation.

FUNCTION 1
Provides four-channel differential voltage acquisition

FUNCTION 2
Uses exact B&R article identity X20AI4222

FUNCTION 3
Matches analog inputs: 4

FUNCTION 4
Matches signal range: +/-10 V

MATCHED SYSTEM COMPONENTS

NO.	DOCUMENTED COMPONENT / ROLE
01	X20 System
02	X20 I/O station
03	four +/-10 V differential inputs and X20TB12
04	Approved wiring, shielding and grounding arrangement

SYSTEM INTEGRATION RECORD

INTEGRATION ITEM	DOCUMENTED ROLE
Host identity	X20 System
Interface role	four-channel differential voltage acquisition
Field / power context	X20 I/O station
Commissioning evidence	Identity, gap, polarity, response and alarm diagnostics recorded

INSTALLATION AND CONNECTION CHECKS

- 1

Confirm the complete B&R X20AI4222 marking and installed X20 System position before work.
- 2

Place the machine or process in the approved maintenance state and isolate every applicable energy source.
- 3

Record four +/-10 V differential inputs and X20TB12, terminal assignments, shielding and protective-ground connections before removal.
- 4

Use ESD controls and protect keyed connectors, terminals and exposed electronics from contamination.

Technical Specifications

Technical values below are limited to the named product record and directly applicable manufacturer documentation.

PARAMETER	VALUE
Analog inputs	4
Signal range	+/-10 V
Input type	Differential
Converter resolution	13 bit including sign
Conversion time	400 us for all inputs

PARAMETER	VALUE
Input impedance	20 Mohm
Bus module	X20BM11 or X20BM15
Terminal block	X20TB12
Protection	IP20

ENGINEERING BOUNDARY

Confirm B&R X20AI4222, X20 I/O station, four +/-10 V differential inputs and X20TB12, wiring, grounding, configuration, companion accessories and controlled commissioning results before service release.

PRE-INSTALLATION CHECKS

- 1

Confirm the complete B&R X20AI4222 marking and installed X20 System position before work.
- 2

Place the machine or process in the approved maintenance state and isolate every applicable energy source.
- 3

Record four +/-10 V differential inputs and X20TB12, terminal assignments, shielding and protective-ground connections before
- 4

Use ESD controls and protect keyed connectors, terminals and exposed electronics from contamination.

Applications and Engineering Context

X20 System system maintenance

Restores four-channel differential voltage acquisition in the documented installation.

Controlled hardware replacement

Preserves the exact X20AI4222 identity and approved configuration.

Interface verification

Confirms four +/-10 V differential inputs and X20TB12 before energization.

Functional recommissioning

Reviews diagnostics and records the controlled system response.

TECHNICAL NOTE

Confirm B&R X20AI4222, X20 I/O station, four +/-10 V differential inputs and X20TB12, wiring, grounding, configuration, companion accessories and controlled commissioning results before service release.

MODEL-SPECIFIC ACCEPTANCE EVIDENCE

CHECK	ACCEPTANCE CONDITION
Identity	X20AI4222 recorded
Host / carrier	X20 System
Physical interface	four +/-10 V differential inputs and X20TB12 matched
Configuration	Exact installed configuration and assignments restored
Functional proof	Controlled four-channel differential voltage acquisition response recorded

IMPORTANT NOTICE

Confirm B&R X20AI4222, X20 I/O station, four +/-10 V differential inputs and X20TB12, wiring, grounding, configuration, companion accessories and controlled commissioning results before service release.

Related Products and Source Record

Brand-qualified Apter Power navigation links are provided for system planning only; manufacturer evidence remains the named source record.

RELATED PRODUCTS ON APTER POWER	
01	Bently Nevada 129716-XXX-037-15-05
02	Bently Nevada 330192-00-20-10-00
03	Bently Nevada 330195-02-12-10-00
04	Bently Nevada 330103-00-07-05-01-05
05	Bently Nevada 330910-00-13-05-02-00
06	Bently Nevada 330910-00-12-05-02-00
07	Bently Nevada 31000-28-05-00-056-01-02
08	Bently Nevada 330880-16-00-039-03-02

Navigation links only - not manufacturer evidence for technical parameters.

MANUFACTURER SOURCE RECORD

B&R X20AI4222 product data | Data sheet X20AI4222

APTER POWER SALES TEAM

WHATSAPP / PHONE

EMAIL

WEBSITE

+86 180 3023 5313

sales13@apterpower.com

www.apterpower.com

