

APTER POWER PRODUCT REFERENCE MANUAL

AX561-1TNE968902R1301

AX561 Analog Input/Output Module, 4 AI / 2 AO

ENGINEERING LENS	MIXED ANALOG ACQUISITION AND OUTPUT RANGE MATCHING
SYSTEM	ABB S500-eCo I/O
SOURCE CONTROL	Manufacturer-published information only

This original Apter Power manual explains mixed analog acquisition and output range matching using only the manufacturer source named inside the document.

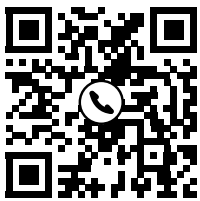
Manufacturer	ABB
Prepared by	Apter Power
Document ID	AP-ABB-11-AX561-1TNE968902R1301-PM-R1
Revision	R1
Issue date	2026-08-14

APTER POWER SALES TEAM

INDUSTRIAL AUTOMATION PRODUCT SUPPORT

Engineering clarity for mixed analog acquisition and output range matching.

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SCAN FOR PRODUCT & QUOTE
AX561-1TNE968902R1301

1. Product Identity and System Role

AX561-1TNE968902R1301 is an ABB S500-eCo analog input/output module with four analog inputs and two analog outputs. Each channel supports the voltage or current ranges published for the module and is configured within the connected ABB controller application.

The module converts field voltage and current signals into controller process values and converts controller commands into analog voltage or current outputs for transmitters, actuators, drives, and other continuous-control devices.

Model Configuration

Field	Verified information
Complete model	AX561-1TNE968902R1301
Manufacturer	ABB
Product description	AX561 Analog Input/Output Module, 4 AI / 2 AO
System	ABB S500-eCo I/O

Product-Specific Design Focus

mixed analog acquisition and output range matching

2. Technical Specifications and Evidence Boundary

Only values supported by the named ABB source are stated. Where the complete ordering code is absent from public data, the field is explicitly marked for verification.

Parameter	Verified value
Manufacturer	ABB
Inputs	4 analog inputs, voltage/current
Outputs	2 analog outputs, voltage/current
Input ranges	+/-2.5 V, +/-5 V, 0 to 5 V, 0 to 10 V, 0/4 to 20 mA
Output ranges	-10 to +10 V, 0/4 to 20 mA
Published resolution	12 bits / 11 bits plus sign
Published weight	0.23 kg

Evidence Note

Use the complete AX561-1TNE968902R1301 identity. ABB maintains a current AX561 product page. The reviewed 2020 data sheet marked the article Active; confirm current commercial availability before ordering. Values not published in the cited ABB source are intentionally not inferred.

3. Functions, Applications and Matched Components

Core Functions

- The module converts field voltage and current signals into controller process values and converts controller commands into analog voltage or current outputs for transmitters, actuators, drives, and other continuous-control devices.
- Preserves the documented role within ABB S500-eCo I/O.
- Supports model-specific engineering review without substituting unverified third-party data.

Application Areas

Application	System role
ABB S500-eCo I/O	Maintains the documented mixed analog acquisition and output range matching role in a correctly matched installation.
Process and machine automation	Supports the control, communication, power, safety, measurement, or protection duty stated in the official source for this exact or verified family identity.
Lifecycle-controlled maintenance	Requires complete-code, nameplate, host-system, and project verification before replacement or recommissioning.

Compatible Components

- ABB CPU or communication interface supporting S500-eCo I/O
- Required 9-pole and 11-pole TA563, TA564, or TA565 terminal blocks selected for the wiring method
- Field devices whose signal range and grounding match an individually configured AX561 channel

Lifecycle Status

ABB maintains a current AX561 product page. The reviewed 2020 data sheet marked the article Active; confirm current commercial availability before ordering.

4. Installation Precautions

- Match every character of AX561-1TNE968902R1301 to the physical nameplate before work.
- Use the exact ABB manual, wiring drawing, and safety instructions for the installed revision.
- De-energize and apply the required lockout, discharge, ESD, and stored-energy controls before removal.
- Back up firmware, parameters, controller project, calibration, and network settings where applicable.
- Verify supply, signal type, polarity, grounding, shielding, connector pinout, load, and environmental limits.
- Commission with the manufacturer test procedure and record results before returning equipment to service.

DECISION GATE - Verify before installation

Use the complete AX561-1TNE968902R1301 identity. ABB maintains a current AX561 product page. The reviewed 2020 data sheet marked the article Active; confirm current commercial availability before ordering. Values not published in the cited ABB source are intentionally not inferred.

Controlling records: physical nameplate, current ABB document, and host-system drawings.

5. Official Source and Use Notice

Official manufacturer source

ABB AX561 product page, AX561 data sheet 3ADR010038, and ABB PLC help ordering data.

<https://www.abb.com/global/en/products/1tne968902r1301>

Apter Power product page

<https://www.apterpower.com/ABB/ax561-1tne968902r1301>

Use Notice

This is an original Apter Power model-specific reference prepared from the ABB source named above. It is not a ABB publication and does not replace the original data sheet, nameplate, certificate, installation drawing, safety instructions, or machine-builder documentation.

ASK FOR QUOTE

For availability and a model-specific quotation, visit www.apterpower.com or contact sales13@apterpower.com.