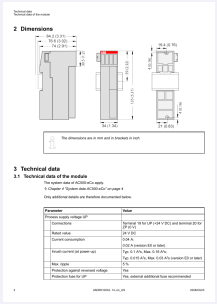
AMIKON TECHNICAL INTELLIGENCE

Product Data Sheet

ABB AI562

Two-channel RTD Input Module



INPUTS	TEMPERATURE STEP	SUPPLY	UPDATE
2 RTD channels	**0.1 deg C**	**24 V DC**	**Less than 1 s**

ABB AI562 measures two configurable resistance-temperature or resistance inputs in an S500-eCo I/O station. Supported sensor selections include Pt100, Pt1000, Ni100 and Ni1000, with two-wire or three-wire RTD connections.

01 VERIFIED PRODUCT PARAMETERS

RTD input channels	2 configurable inputs in one group
Sensor wiring	2-wire or 3-wire RTD
RTD families	Pt100, Pt1000, Ni100, Ni1000
Resistance ranges	150 ohm and 300 ohm
RTD resolution	0.1 deg C
Process supply	24 V DC; -15% to +20%
Process-supply current	40 mA before E0; 20 mA for E0 or later
Maximum power dissipation	1.1 W before E0; 0.6 W for E0 or later
Group isolation	500 V DC between input group and rest of module
Module update time	All channels less than 1 s

Technical values were verified against ABB 3ADR010032 rev.14, 2026-03-23; AI562 connections.

02 ADDITIONAL TECHNICAL DATA

Analog conversion time	Typically 190 ms per channel
Input data length	4 bytes
Wire loop resistance	Less than 20 ohm
Sensor power dissipation	Maximum 1 mW
Cable length	10 m unshielded or 100 m shielded; conductor greater than 0.14 mm2

03 SYSTEM ROLE AND APPLICATIONS

The module is ordered as 1TNE968902R1102. Its two channels share one isolated group and use a separate 24 V DC process supply. Check the hardware index before applying power-consumption or accuracy figures: ABB distinguishes versions before E0 from E0 and later.

- Short-run temperature sensing: acquire a supported two-wire RTD while accounting for lead resistance.
- Remote temperature sensing: use three-wire RTD connection to reduce the effect of lead resistance on measurement.
- Resistance acquisition: configure a 150 ohm or 300 ohm range to acquire resistance rather than a scaled temperature.

04 OFFICIAL INSTALLATION FACTS

- Qualified personnel must isolate all supply and process voltages before fitting, removing or wiring AI562.
- Fit the module on the specified DIN rail or M4 wall mounting; keep natural-convection paths unobstructed.
- Select an 11-pin TA563-11, TA564-11 or TA565-11 terminal block; these are ordered separately.
- Connect 24 V DC to UP terminal 19 and 0 V to ZP terminal 20 using an appropriate SELV/PELV supply.

05 OFFICIAL DOCUMENTATION

ABB 3ADR010032 rev.14, 2026-03-23; AI562 connections

AMIKON PRODUCT SUPPORT

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