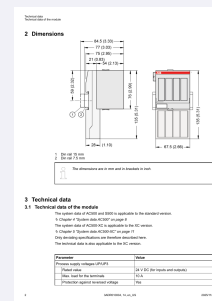


AMIKON TECHNICAL INTELLIGENCE

Product Data Sheet

ABB CI522-MODTCP

Modbus Digital I/O Interface



FIXED INPUTS	FIXED OUTPUTS	CONFIGURABLE	PROTOCOL
8 DI	8 DO	8 DC	Modbus TCP

ABB CI522-MODTCP brings discrete input and output signals into a Modbus TCP remote station. It contains eight fixed digital inputs, eight fixed transistor outputs and eight configurable digital channels, with fast-counter functions for suitable pulse signals.

01 VERIFIED PRODUCT PARAMETERS

Digital channel allocation	8 fixed inputs, 8 fixed outputs and 8 configurable digital I/O
Network interface	10/100 Base-TX; two RJ45 sockets and internal switch
Process-image size	12 input bytes and 20 output bytes
Process supply rating	24 V DC at UP and UP3; -15% / +20% system tolerance
Normal UP consumption	0.15 A
UP3 consumption	0.06 A plus maximum 0.5 A per output
Internal heat dissipation	Maximum 6 W
Galvanic isolation boundary	Ethernet interface isolated from the rest of the module
Digital input characteristic	IEC 61131-2 Type 1
Input-state thresholds	Low: -3 to +5 V; high: +15 to +30 V

02 ADDITIONAL TECHNICAL DATA

Input filter setting	0.1-32 ms; typical setting 0.1 ms
Input current at 24 V	Typically 5 mA per channel
Output-current limits	500 mA per channel; 4 A per eight-channel group before derating
Counter frequency by mode	Modes 1-6: 200 kHz; mode 7: 50 kHz; mode 9: 35 kHz; mode 10: 20 kHz
Maximum digital cable length	1000 m shielded or 600 m unshielded

03 SYSTEM ROLE AND APPLICATIONS

The standard interface is ordered as 1SAP222200R0001. Its register image, channel assignments and fault response must match the controller configuration. The ABB documentation supports remote I/O and engineered high-availability arrangements; an interface alone does not establish controller redundancy or a safety function.

- Distributed discrete I/O: acquire 24 V field states and deliver transistor output commands through an Ethernet-linked remote station.
- High-availability field access: integrate the interface into the documented AC500 redundant-controller system with coordinated diagnostics.
- Pulse acquisition: configure the documented fast counter to acquire suitable pulse signals using the mode-specific frequency limits.

04 OFFICIAL INSTALLATION FACTS

- Disconnect all supply and process voltages before replacing the interface or connecting and disconnecting its terminal blocks.
- Install CI522-MODTCP on TU507-ETH or TU508-ETH and maintain free natural convection.
- Wire protected SELV/PELV UP at 1.8/2.8, UP3 at 3.8 and ZP returns at 1.9/2.9/3.9.
- Use terminals 1.0-1.7 for DC0-DC7, 2.0-2.7 for DI8-DI15 and 3.0-3.7 for DO8-DO15.

05 OFFICIAL DOCUMENTATION

[ABB 3ADR010004 rev.14, 2025-11-28; CI52x system technology and library help](#)

AMIKON PRODUCT SUPPORT

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