

# ADAM-5000L/TCP

# ADAM-5000/TCP

4-slot Distributed DA&C System  
for Ethernet

8-slot Distributed DA&C System  
for Ethernet



ADAM-5000/TCP

ADAM-5000L/TCP



## Features

- ARM 32-bit RISC CPU
- 10/100Base-T auto-negotiation high-speed communication port
- Supports Modbus/TCP for easy integration
- Supports UDP event handling function
- Up to 100 m communication distance w/o repeater
- Allows remote configuration via Ethernet
- Allows concurrent access for 8 host PCs
- 4 I/O slots for up to 64 points and 8 I/O slots for up to 128 points data monitoring and control
- 1500 V<sub>DC</sub> isolation for Ethernet communication
- Built-in watchdog timer for system auto-reset
- Windows utility
  - I/O modules configuration and calibration
  - Network auto searching
  - Data stream setting
  - Current status monitoring and alarm trigger
- Provides C and .NET class library to develop applications

## Introduction

ADAM-5000L/TCP and ADAM-5000/TCP are both Ethernet-based I/O systems. Without a repeater, ADAM-5000L/TCP and ADAM-5000/TCP can cover a communication distance up to 100 m. This allows remote configuration via Ethernet and eight PCs can simultaneously access the data. The ADAM-5000L/TCP and ADAM-5000/TCP are the solutions for easy configuration and efficient management. It is an ideal and cost-effective solution for eAutomation architecture.

## Specifications

### Control System

- CPU** 32-bit ARM RISC
- I/O Slots** ADAM-5000L/TCP: 4  
ADAM-5000/TCP: 8
- Memory** Flash ROM: 512 KB  
RAM: 4 MB
- Operating System** Real-time OS
- LED Indicators** Power (3.3 V, 5 V)  
CPU  
Communication (Link, Active, 10/100 Mbps, Tx, Rx)  
Battery

### Communications (Ethernet)

- Data Transfer Rate** Up to 100 Mbps
- Event Response Time** < 5 ms
- Interface** 1 x 10/100Base-T (RJ-45)
- Wiring** UTP, category 5 or greater

### Communications (Serial)

- Comm. Distance** RS-485: 1.2 km (4000 feet)  
RS-232: 15 m
- Comm. Protocol** Modbus/RTU
- Data Transfer Rate** Up to 115.2 kbps
- Interface** 1 x DB9-M for RS-485  
1 x DB9-F for RS-485  
1 x DB9-F for RS-232
- Max. Nodes** 12 (in RS-485 daisy-chain network for Remote I/O connection)

### Power

- Power Consumption** 4.0 W @ 24 Vdc (ADAM-5000L/TCP) (not including I/O modules)  
5.0 W @ 24 Vdc (ADAM-5000/TCP) (not including I/O modules)
- Power Input** Unregulated 10 ~ 30 V<sub>DC</sub>

### Software

- C and .NET Class Library**
- Windows Utility** Network setting, I/O configuration & calibration, data stream, alarm setting
- Modbus/TCP OPC Server**

### Protection

- Communication Line Isolation** 3.000 V<sub>DC</sub>
- I/O Module Isolation** 3.000 V<sub>DC</sub>
- LAN Communication** 1.500 V<sub>DC</sub>
- Overvoltage Protection** Yes
- Power Reversal Protection** Yes

### General

- Certifications** CE, FCC class A
- Connectors** 1 x DB9-M/DB9-F/screw terminal for RS-485 (communication)  
1 x DB9-F for RS-232 (internal use)  
1 x Screw-terminal for power input  
1 x RJ-45 for LAN
- Dimensions (W x H x D)** ADAM-5000L/TCP: 231 x 110 x 75 mm  
ADAM-5000/TCP: 355 x 110 x 75 mm
- Enclosure** ABS+PC
- Mounting** DIN-rail, wall

### Environment

- Humidity** 5 ~ 95%, non-condensing
- Operating Temperature** - 10 ~ 70° C (14 ~ 158° F)
- Storage Temperature** - 25 ~ 85° C (-13 ~ 185° F)

## Ordering Information

- ADAM-5000L/TCP** 4-slot Ethernet-based Distributed DA & C System
- ADAM-5000/TCP** 8-slot Ethernet-based Distributed DA & C System

19	Embedded Controllers
20	PC-based Controllers
21	PAC
22	Motion Control
23	RS-485 I/O
24	Ethernet I/O
25	Building Automation
26	Self-service Terminals
27	eHome Platforms