# ADAM-5000L/TCP
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## 4-slot Distributed DA&C System for Ethernet
## 8-slot Distributed DA&C System for Ethernet

## Features

- Cortex M4 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 16 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 $V_{DC}$ 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
- Support GCL function for easy IO interlocking logic

## Introduction

The ADAM-5000L/TCP and ADAM-5000/TPC are both Ethernet-based I/O systems. Without a repeater, the ADAM-5000L/TCP and ADAM-5000/TCP can cover a communication distance up to 100 m. This allows remote configuration via Ethernet and sixteen 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** Cortex M4
- **I/O Slots** ADAM-5000L/TCP: 4<br>ADAM-5000/TCP: 8
- **Memory** Flash ROM:1 MB
- **Operating System** Real-time OS
- **LED Indicators** Power (3.3 V)<br>RUN<br>Communication (Link, Active, 10/100 Mbps, Tx, Rx)
- **Storage** 1 x MicroSD slot

### Communications (Ethernet)

- **Data Transfer Rate** Up to 100 Mbps
- **Event Response Time** < 5 ms
- **Interface** 2 x RJ-45 sharing one MAC Address
- **Wiring** UTP, category 5 or greater

### Communications (Serial)

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

### Power

- **Power Consumption** 4.0 W @ 24 $V_{DC}$ (ADAM-5000L/TCP)<br>(not including I/O modules)<br>5.0 W @ 24 $V_{DC}$ (ADAM-5000/TCP)<br>(not including I/O modules)
- **Power Input** Unregulated 10 ~ 30 $V_{DC}$

### Software

- **API** VS.NET Llass Library
- **Windows Utility** Network setting, I/O configuration & calibration, data stream, alarm setting
- **Modbus/TCP OPC Server**

### Protection

- **Communication Line Isolation** 3.000 $V_{DC}$
- **I/O Module Isolation** 3.000 $V_{DC}$
- **LAN Communication** 1.500 $V_{DC}$
- **Overvoltage Protection** Yes
- **Power Reversal Protection** Yes

### General

- **Certification** CE, FCC class A
- **Connectors** 1 x DB9-M/DB9-F/screw terminal for RS-485 (communication)<br>1 x DB9-F for RS-232 (internal use)<br>1 x Screw-terminal for power input<br>2 x RJ-45 for LAN
- **Dimensions (W x H x D)** ADAM-5000L/TCP: 231 x 110 x 75 mm<br>ADAM-5000/TCP: 355 x 110 x 75 mm
- **Enclosure** ABS+PC
- **Mounting** DIN-rail, wall

### Environment

- **Operating 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


All product specifications are subject to change without notice
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