

ADAM-5000L/TCP

ADAM-5000/TCP

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/TCP 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
ADAM-5000/TCP: 8
- Memory Flash ROM: 1 MB
- Operating System Real-time OS
- LED Indicators Power (3.3 V)
RUN
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)
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 (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)
(not including I/O modules)
5.0 W @ 24 V_{DC} (ADAM-5000/TCP)
(not including I/O modules)
- Power Input Unregulated 10 ~ 30 V_{DC}

Software

- API VS.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_{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)
1 x DB9-F for RS-232 (internal use)
1 x Screw-terminal for power input
2 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

- 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