ADAM-5000L/TCP
ADAM-5000/TCP

4-slot Distributed DA&C System for Ethernet
8-slot Distributed DA&C System for Ethernet



RoHS COMPLIANT 2002/95/EC CE FCC

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
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 LIass 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

All product specifications are subject to change without notice