

ADAM-4501

ADAM-4501D

**Ethernet-enabled Communication Controller
with 8-ch DI/O**

**Ethernet-enabled Communication Controller
with 8-ch DI/O and 7-segment LED**



ADAM-4501

ADAM-4501D



Features

- 10/100Base-T Ethernet interface
- Email alarm function
- Built-in web server
- Built-in FTP server and client
- Supports versatile I/O modules
- Full functions of standard TCP and UDP sockets
- Optional 4 digit 7-segment LED display
- Supports Modbus/RTU and Modbus/TCP function libraries
- 1.5 MB Flash ROM/640 kB SRAM
- 4 serial ports available
- Integrates all operations in Windows utility

Introduction

The ADAM-4501/D consists of compact-sized Ethernet-enabled communication controllers with a x86 CPU architecture. They support not only an Ethernet interface but also 4 serial ports, which makes them very suitable for industrial communication and control applications. The Ethernet-enabled features include built-in HTTP Server, FTP Server and email alarm functions. The modularized I/O design provides high flexibility for versatile application requirements. The ADAM-4501/D also supports rich Modbus function libraries including Modbus/RTU (Master/Slave) and Modbus/TCP (Server/Client) function libraries.

Specifications

General

- **Connectors**
 - 1 x RJ45 (Ethernet)
 - 1 x RJ48 (COM1)
 - 2 x Plug-in terminal blocks (#14 ~ 28 AWG)
- **Indicators**
 - LEDs for Power, run, communication and battery
- **Power Input**
 - Unregulated 10 ~ 30 V_{DC} w/power reversal protection

System

- **CPU**
 - 40 MHz, 16-bit
- **CPU Power Consumption**
 - 4 W @ 24 V_{DC}
- **Memory**
 - 1.5 MB flash memory:
 - 256 kB system flash disk (Drive C: Read Only)
 - 256 kB flash memory (accessed by function LIB)
 - 1024 kB file system, 960 kB for user applications (Drive D: Read/Write)
 - 640 kB SRAM, up to 384 kB with battery backup (accessed by function LIB)
- **Real-time Clock (RTC)**
 - Yes
- **Watchdog Timer**
 - Yes

Digital Input

- **Channels**
 - 4
- **Input Level**
 - Dry Contact:
 - Logic level 0 : Close to GND
 - Logic level 1 : Open
 - Wet Contact:
 - Logic level 0 : 2 V max.
 - Logic level 1 : 4 V ~ 30 V

Digital Output

- **Channels**
 - 4, open collector to 30 V, 30 mA max. load
- **Power Dissipation**
 - 200 mW

Communication

- **LAN**
 - 1 x 10/100Base-T
- **RS-485 Speed**
 - 1.2 to 115.2 kbps
- **Serial Ports**
 - COM1: RS-232 (Full Modem Signals)
 - COM2, COM3: RS-485
 - COM4: RS-232 (Programming Port)/RS-485 (Selected by Jumper)

Software

- **C Library**
 - Borland C++ 3.0 for DOS
- **Operating System**
 - ROM-DOS

Environment

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

Ordering Information

- **ADAM-4501**
 - Ethernet-enabled Comm. Controller w/ 8-ch DI/O
- **ADAM-4501D**
 - Ethernet-enabled Comm Controller, 8-ch DI/O, LED