ADAM-4501
ADAM-4501D

Ethernet-enabled Communication Controller with 4 x DI/O

ADAM-4501 with 7-segment LED Display

Features

- 10/100Base-T Ethernet Interface
- Email alarm function
- Built-in Web Server
- Built-in FTP Server and Client
- Supports functionally 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
- Integrated All Operations in Windows Utility

ADAM-4501	ADAM-4501D

Introduction

The ADAM-4501/4501D 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-4501/4501D 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

Input/Output

- **Digital Input**
  Channels: 4
  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 Communication Controller with 4 x DI/O
- **ADAM-4501D** ADAM-4501 with 7-segment LED Display