

ADAM-4502

Ethernet-enabled Communication Controller with 2-ch AI/O and 4-ch DI/O



Features

- 10/100Base-T(X) 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
- Supports Modbus/RTU and Modbus/TCP function libraries
- 1.5 MB Flash ROM/640 kB SRAM
- 4 serial ports
- Integrated all operations in Windows utility

Introduction

With its modular design, ADAM-4502 has all the same functionality as ADAM-4501, but provides different I/O options. The ADAM-4502 provides one Ethernet interface and 4 serial ports module, but also features 1 analog input, 1 analog output, 2 digital inputs and 2 digital outputs. This versatility allows users to implement rich interfaces for different applications.

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

Analog Input

- **Channels**
 - 1
- **Input Type**
 - mV, V, mA
- **Input Range**
 - ±150 mV, ±500 mV, ±1 V, ±5 V, ±10 V, ±2.5V, ±20 mA
- **Resolution**
 - 16-bit
- **Sampling rate**
 - 100 Sample/second
- **Isolation Voltage**
 - 1,000 V_{DC}

Analog Output

- **Channels**
 - 1
- **Output Type**
 - V, mA
- **Output Range**
 - 0 ~ 10 V, 0 ~ 20 mA
- **Slew Rate**
 - 1 V/μs
- **Isolation Voltage**
 - 1,000 V_{DC}

Digital Input

- **Channels**
 - 2
- **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**
 - 2, open collector to 40 V, 1 A max. load
- **Power Dissipation**
 - 1 W load maximum

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-4502**
 - Ethernet Comm Controller w/2-ch AI/O, 4-ch DI/O

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