

# 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



Esis Pty Ltd www.esis.com.au

### 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<sub>DC</sub> w/power reversal protection

#### System

- **CPU**
  - 40 MHz, 16-bit
- **CPU Power Consumption**
  - 4 W @ 24 V<sub>DC</sub>
- **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<sub>DC</sub>

#### 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<sub>DC</sub>

#### 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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