ADAM-5510 Series
4/8 slots PC-based Controller

ADAM-5510E   ADAM-5510

RoHS COMPLIANT 2002/95/EC   CE FCC
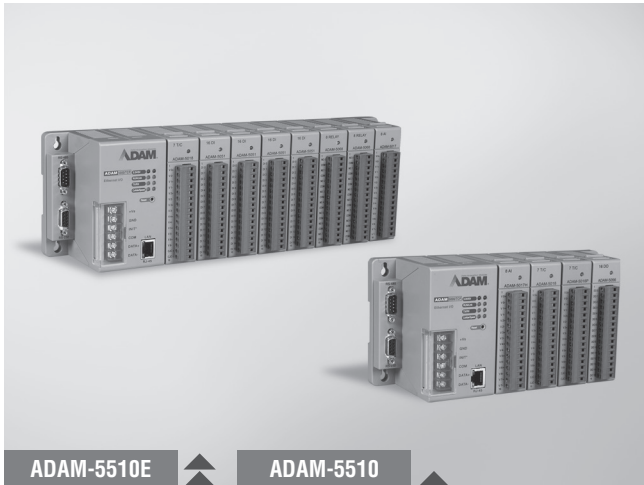
Features

- Supports Modbus/RTU, Modbus/TCP Master and Slave function libraries
- Windows-based utility
- Optional support C Programming and IEC-61131-3 standard
- Complete set of I/O modules
- Built-in real-time clock and watchdog timer
- ROM-DOS operating system
- 4 serial communication ports
- Optional support Ethernet Interface with network function, such as Web Server, FTP Server and Email Alarm.
- 4 or 8 I/O slot expansion

Introduction

The ADAM-5510 Series are ideal for PC-based data acquisition and control applications. They are compact, controllers with an Intel x86- based CPU running Datalight ROM-DOS. Built-in battery backup SRAM is the best choice for complex logic or data storage applications. For professional C/C++ programmers, the ADAM-5510 Series application programs may be written and compiled in Borland C++ 3.0, and downloaded to the controller.

For user who familiar with PLC programing environment, we provide the option for customer to use the KW softlogic which supports 5 standard IEC 61131-3 programming languages, including LD/FB/SFC/IL/ST.

Specifications

Control System

- **CPU** — 80188, 16-bit microprocessor
- **I/O Slots** — Optional 8 or 4 slots
- **LED Indicators** — Power, CPU, communications and battery
- **Memory** — Flash disk: 1 MB (960 KB for user applications)
  Flash memory: 256 KB
  Flash ROM: 256 KB
  RAM: 640 KB (up to 384 KB with battery backup)
- **Memory (Softlogic version)** — Flash disk: 512KB
  Flash memory: 768KB
  Flash ROM: 256KB
  RAM: 640KB SRAM, 32KB with battery backup (ADAM-5510KW)
  RAM: 768KB SRAM, 17KB with battery backup (ADAM-5510KW/TCP,ADAM-5510EKW/TP)
- **Operating System** — ROM-DOS (MS-DOS 6.22 Compatible)
- **Real-time Clock** — Yes
- **Watchdog Timer** — Yes

Serial Communication

- **Max. Nodes** — 256 (in RS-485 daisy-chain network)
- **Distance** — 1.2 km (4,000 feet)
- **Speed** — 1,200 bps ~ 115.2 kbps (9600, 19200, 38400 bps for Softlogic version)
- **Isolation** — 2500 V_{DC} (COM2 only)

Ethernet Communication

- **Medium** — Cat.5 cable with RJ-45 connector
- **Distance** — 100 m
- **Speed** — 10/100Base-T

Power

- **Power Consumption** — 4 W @ 24 V_{DC} (not including I/O modules)
- **Power Input** — Unregulated 10 ~ 30 V_{DC}
- **Isolation** — 3000 V_{DC}
- **Reverse Protection** — Yes

Software

- **ROM DOS version** — C library for Borland C++ 3.0
- **Softlogic version** — Development tool : KW Multiprog
  Runtime kernel : ProConOS

General

- **Certification** — CE, FCC Class A
- **Connectors** — COM1 : DB9-M
  COM2 : Screw terminal(RS-485)
  COM3 : DB9-F (RS-232/Programming)
  COM4 : DB9-M (RS-232/485)
  Power : Screw terminal
  LAN : RJ-45 (option)
- **Dimensions** — 4-slot: 231 x 110 x 75 mm
  8-slot: 355 x 110 x 75 mm
- **Enclosure** — ABS+PC
- **Mounting** — DIN-rail, stack, wall

Environment

- **Humidity** — 5 ~ 95%, non-condensing
- **Operating Temperature** — -10 ~ 70°C (14 ~ 158°F)
- **Storing Temperature** — -25 ~ 85°C (-13 ~ 185°F)

Ordering Information

- **ADAM-5510M** — 4-slot PC-based Controller
- **ADAM-5510E** — 8-slot PC-based Controller
- **ADAM-5510/TCP** — 4-slot PC-based Controller with Ethernet
- **ADAM-5510E/TCP** — 8-slot PC-based Controller with Ethernet
- **ADAM-5510KW** — 4-slot Softlogic Controller
- **ADAM-5510KW/TCP** — 4-slot Softlogic Controller with Ethernet
- **ADAM-5510EKW/TP** — 8-slot Softlogic Controller with Ethernet
- **MPROG-PRO535E** — KW Multiprog Pro v5.35 (128k bytes I/O, Win7 support)