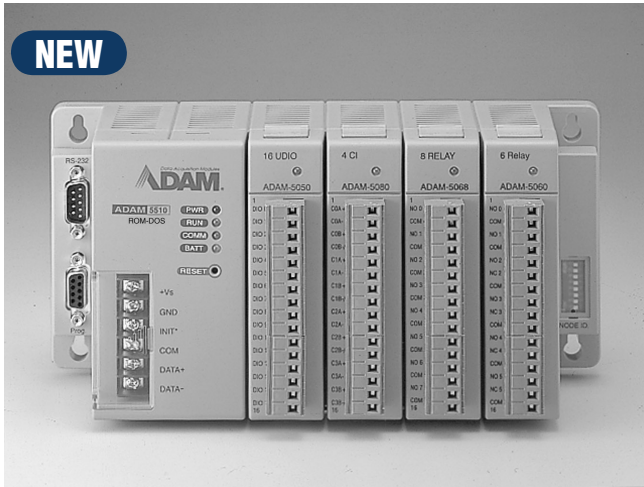


ADAM-5510/5510M ADAM-5510KW

4-Slot PC Based
Programmable Controller

4-Slot PC Based
SoftLogic Controller

NEW



Features

- Four Serial Communication Ports (ADAM-5510M/5510KW)
- 4 I/O slots or 8 I/O Slots extension
- 1.5 MB Flash ROM (ADAM-5510M/5510KW)
- 640 KB SRAM (384 KB for Battery Backup) (ADAM-5510M/5510KW)
- Operating System : ROM-DOS
- Watchdog Timer
- Software Support : Borland C++ for DOS (ADAM-5510/5510M)
- Pre-built IEC61131 Softlogic control engine (ADAM-5510KW)

Introduction

The ADAM-5510/5510M are ideal for PC-based data acquisition and control applications. It is a compact, standalone controller 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 Inprise (Borland) Turbo C, and downloaded to the ADAM-5510/5510M. With the power of the ADAM-5510/5510M, users can easily accomplish specialized functions which are difficult with traditional controllers. Each ADAM-5510/5510M system can handle up to 4 I/O slots (up to 64 I/O points).

Specifications

- **CPU** 16-bit microprocessor
- **Memory** ADAM-5510:
256 KB flash ROM: 170 KB of the 256 KB for user app.
256 KB flash memory
256 KB SRAM: 192 KB of the 256 KB for system use,
60 KB with battery backup
ADAM-5510M, ADAM-5510KW
1.5 MB flash memory (960 KB for user applications)
640 KB SRAM, up to 384 KB with battery backup
- **Operating System** ROM-DOS
- **Timer BIOS** Yes
- **Real-time Clock** Yes
- **Watchdog Timer** Yes
- **COM1** RS-232
- **COM2** RS-485
- **Prog. Port/COM3** TX, RX, GND (RS-232 Interface)
- **COM 4** RS-232/485 (ADAM-5510M & 5510KW)
- **Comm. Protocol** Modbus/RTU (5510KW)
- **I/O Capacity** 4/8 Slots
- **Status Display** Power, CPU, communication and Battery
- **CPU Power Consumption** 1.0 W
- **Certifications** ADAM-5510: CE, FCC
ADAM-5510M, 5510KW, 5510E, 5510EKW: CE

Isolation

- **Communication Power** 3000 V_{DC}
- **Input/Output** 3000 V_{DC}
- **Communication** 2500 V_{DC} (COM2 only)

Power

- **Unregulated + 10 to + 30 V_{DC}**
- **Protected against Power Reversal**

Network

- **Medium** RS-485 (2-wire)
- **Speeds (bps)** 9600, 38400, 57600 and 115.2 K
- **Maximum Nodes** Up to 256 multi-drop system per serial port

Software Support

- **C Library (ADAM-5510/5510M)** Borland C++ 3.0 for DOS
- **KW SoftLogic Software** ADAM-5510KW

Mechanical

- **Case** KJW with captive mounting hardware
- **Plug-in Screw Terminal Block** Accepts 0.5 mm² to 2.5 mm², 1 - #12 or 2 - #14 to #22 AWG

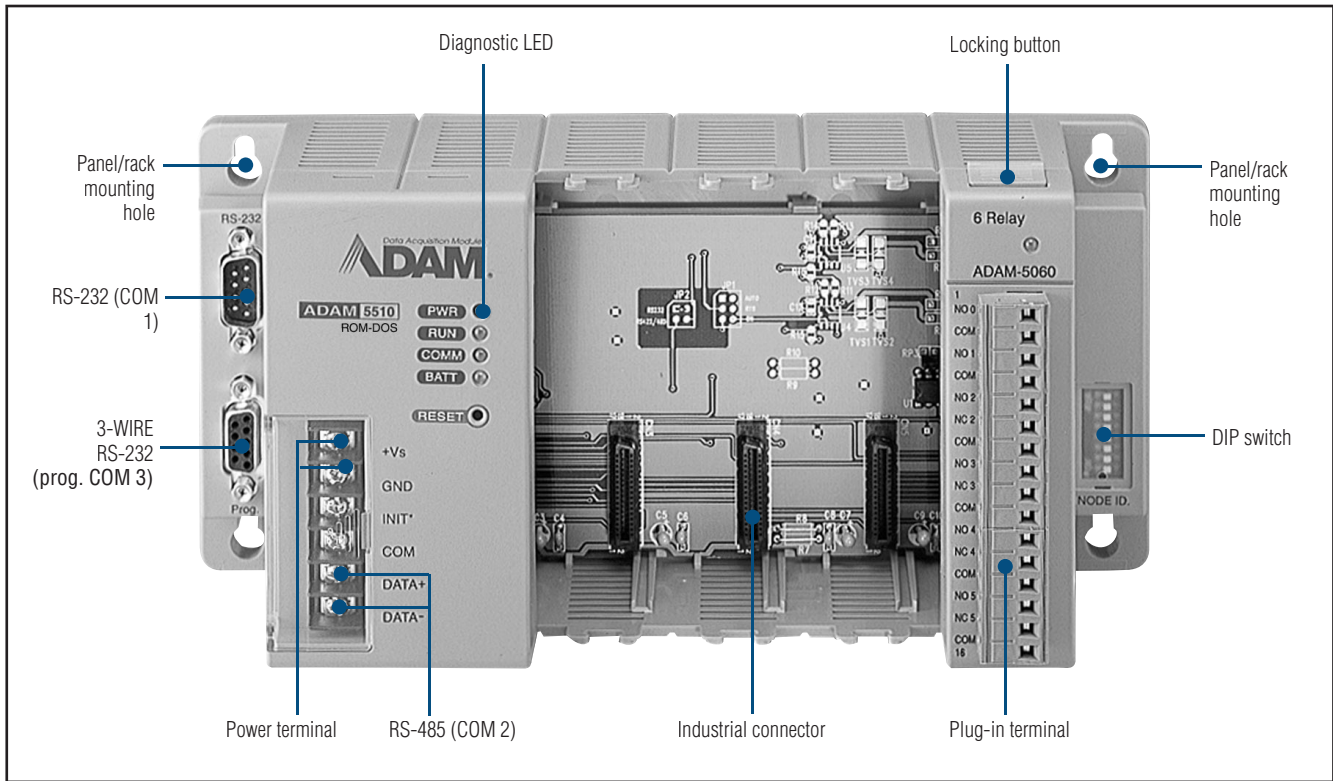
Environment

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

Ordering Information

- **ADAM-5510-A3** 4-Slot PC-based Programmable Controller
- **ADAM-5510M** 4-Slot PC-based Programmable Controller
- **ADAM-5510KW** 4-Slot PC-based SoftLogic Controller
- **ADAM-5510E** 8-Slot PC-based Programmable Controller
- **ADAM-5510EKW** 8-Slot PC-based SoftLogic Controller
- **PCLS-OPC/ADM** OPC Server for ADAM-4000/5000 Series (RS-485)
- **PCLS-OPC/MOD** Modbus OPC Server
- **PCLS-ADAMView-W32** ADAMView Data Acquisition Software

ADAM-5510/5510M ADAM-5510KW



Feature Details

Why PC-based Control?

Today, more and more major manufacturers are gaining a competitive edge by replacing their factory floor PLC “black boxes” and utilizing the latest advances in automation control technology. One of the major drawbacks of the PLC is its proprietary nature. Not only is the PLC proprietary, but so is everything associated with it – the hardware, the operating system, the programming methods, the networks, the processors, the I/O, and more. Once you have selected a PLC supplier, you are essentially locked into their product line. This exclusivity limits how far you can expand your operations – and expand your business – since you can only grow as far as your supplier’s technology will let you. On the other hand, PC-based controllers are designed as an open structure with advanced capabilities for computing, communication and controlling. There will be no more limitation to further integration and expansion.

ADAM-5510/5510M Stand-alone “C” Programmable Controller

The design of the ADAM-5510/5510M is based on the experience of various needs in industrial control. The ADAM-5510 series adopts a popular RS-485 bus, which can work either as a standalone unit or within a distributed control system. The user only needs to write a program in C to run on the ADAM-5510 for a general-purpose application.

More Data Memory to Support Versatile Applications

The ADAM-5510 series offers plenty of spare memory for developing complex logic or data storage applications, such as data recording, which is difficult for traditional controllers. The ADAM-5510, in addition to its 256 KB of flash ROM, offers 256 KB of flash memory plus 256 KB of SRAM (60 KB of that backed up by a lithium battery). The ADAM-5510M features 1.5 MB flash memory and 640 KB SRAM (up to 384 KB battery backed up memory).

Communication Supported by 2 Communication Ports

The ADAM-5510 series has four independent communication ports. This means ADAM-5510 series can simultaneously communicate with an RS-232 operator interface (COM1), RS-485 devices (COM2), RS-232 3-wire device (COM3), and an RS-232/485 selectable interface (COM4, ADAM-5510M only).

Complete I/O Module and C Library Support

The ADAM-5510 series supports fully industrial I/O modules including digital I/O, analog I/O, counter, and special purpose I/O modules such as T/C and RTD. It also offers well-stocked Inprise (Borland) C libraries, including system resources functions, I/O functions, popular control algorithms and communication functions.

Multiple RS-232 Port Support

The ADAM-5090 is a 4-port RS-232 module that is equipped with 4 RS-232 ports, which make it especially suitable for bi-direction communication. It can simultaneously read/write data from other third-party devices such as barcode readers or PLCs, as long as they have an RS-232 interface. Furthermore, commands can be issued through the ADAM-5090 to control other devices. It is fully integrated with the ADAM-5510 series, and transmits data through RS-232 ports. The whole integrated system is an intelligent stand-alone network, which can be employed in connecting and issuing commands to control devices in remote factory locations.