

# ADAM-5510

## PC-Based Programmable Controller



### Features

- Control Flexibility with C Programming
- Complete Set of I/O Modules
- Built-in 512KB Flash and 256KB SRAM
- Built-in Real-Time Clock and Watchdog Timer
- ROM-DOS operating system
- 4 I/O slot extension

### Introduction

ADAM-5510 is 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, ADAM-5510 series application programs may be written and compiled in (Borland) C, and downloaded to ADAM-5510. With the power of the ADAM-5510, users can easily accomplish specialized functions which are difficult with traditional controllers. Each ADAM-5510 system can handle up to 4 I/O slots (up to 64 I/O points).

### Specifications

- **CPU** 16-bit microprocessor
- **Memory** 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
- **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)
- **I/O Capacity** 4 Slots
- **Status Display** Power, CPU, communication and Battery
- **CPU Power Consumption** 1.0 W

#### Isolation

- **Communication Power** 3000 V<sub>DC</sub>
- **Input/Output** 3000 V<sub>DC</sub>
- **Communication** 2500 V<sub>DC</sub> (COM2 only)

#### Power

- **Unregulated + 10 to + 30 V<sub>DC</sub>**
- **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** Borland C++ 3.0 for DOS

#### Mechanical

- **Case** KJW with captive mounting hardware
- **Plug-in Screw Terminal Block** Accepts 0.5 mm<sup>2</sup> to 2.5 mm<sup>2</sup>, 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** PC-based Programmable Controller