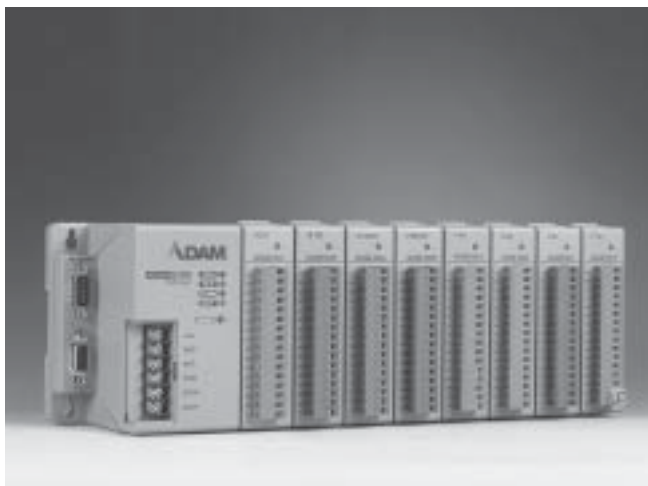# ADAM-5510KW
4-slot PC-based SoftLogic Controller

# ADAM-5510EKW
8-slot PC-based SoftLogic Controller



CE

## Features

- IEC-61131-3 standard package
- Supports LD/FB/SFC/IL/ST language
- Graphical programming interface
- Cross programming language compiling capability
- Supports floating point calculation
- Supports AI/AO/DI/DO/Counter Function Blocks
- Powerful debug tool
- Built-in Modbus/RTU Master and Slave
- Supports up to 128 Local I/O Points
- Handles typical 32 Modbus/RTU remote I/O modules
- Supports more than 9000 coils in LD language
- Supports 3 serial ports including 1 RS-485 and 2 RS-232/485 ports

## Introduction

ADAM-5510EKW and ADAM-5510KW are PC-based Soft-Logic Controllers. They feature 5 standard IEC61131-3 programming languages so PLC users can develop control strategies in their familiar programming languages. The strong MULTIPROG software and stable ProConOS make ADAM-5510EKW and ADAM-5510KW the best choice for PC-based Soft-logic controllers in the market.

ProConOS, (Programmable Controller Operating System), has over 250,000+ installations, and is a pre-emptive, multi-tasking run-time software providing deterministic operation down to one millisecond and runs applications developed with MULTIPROG, a fully-featured IEC 61131-3 development environment. With this KW Software distribution agreement, Advantech has bundled the ProConOS run-time software on ADAM-5510EKW and ADAM-5510KW Controllers creating a SoftLogic Solution. It will greatly benefit PLC users to enjoy the PC- based advantage of ADAM-5510EKW and ADAM-5510KW

Different from the original ADAM-5510 hardware, the ADAM-5510EKW and ADAM-5510KW includes more memory to raise system efficiency and users' programming flexibility. The main unit of ADAM-5510EKW and ADAM-5510KW include a 1.5 MB flash memory and 640 KB SRAM which includes battery backup RAM up to 32 KB. In addition, 4 COM ports enrich the communication capacity of ADAM-5510EKW and ADAM-5510KW to integrate with remote I/O or other 3rd party devices based on the Modbus/RTU protocol.

For advanced system integration, the ADAM-5510EKW and ADAM-5510KW are built with a Modbus/RTU Server. Therefore, it also supports Modbus/RTU protocol to communicate with any Modbus® devices as well as HMI Software/User's APs built with Modbus driver or Modbus/RTU OPC Server, both of which are included in the SCADA systems.

## Specifications

### Control System

- **CPU** — 16-bit microprocessor
- **I/O Capacity** — 4 slots (ADAM-5510KW)
  8 slots (ADAM-5510EKW)
- **LED Indicators** — Power, CPU, communication and battery
- **Memory** — Flash disk: 512 KB
  Flash memory: 768 KB
  Flash ROM: 256 KB
  RAM: 640 KB SRAM, 32 KB with battery backup
- **Operating System** — ROM-DOS
- **Real-time Clock** — Yes
- **Watchdog Timer** — Yes

### Communications

- **Comm. Protocol** — Modbus/RTU
- **Max. Nodes** — 32 (in RS-485 daisy-chain network)
- **Medium** — RS-485 (2-wire)
- **Transmission Distance** — 1.2 km (4000 feet)
- **Transmission Speed** — 9600, 19200 and 38400 bps

### Protection

- **Power Input** — 3000 $V_{DC}$
- **Communication** — 2500 $V_{DC}$ (COM2 only)
- **Power Reversal Protection** — Yes

### Power

- **Power Consumption** — 1 W (not including I/O modules)
- **Power Input** — Unregulated 10~30 $V_{DC}$

### General

- **Certifications** — CE
- **Connectors** — ADAM-5510KW: 1 x DB9-M for RS-232 (COM1)
  ADAM-5510EKW: 1 x DB9-M for RS-232/485 (COM1)
  1 x Screw terminal for RS-485 (COM2)
  1 x DB9-F for RS-232/Programming (COM3)
  1 x DB9-M for RS-232/485 (COM4)
  1 x Screw-terminal for power input
- **Dimensions** — 4-slot: 231 x 110 x 75 mm
  8-slot: 355 x 110 x 75 mm
- **Enclosure** — ABS+PC
- **Mounting** — DIN 35 rail, stack, wall

### Environment

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

## Ordering Information

- **ADAM-5510KW** — PC-based SoftLogic Controller
- **ADAM-5510EKW** — 8-slot PC-based SoftLogic Controller
- **PCLS-OPC/MOD** — Modbus OPC Server
- **PCLS-ADAMVIEW32** — ADAMView Data Acquisition Software
- **MPROG-BAS33** — KW Multiprog Softlogic Development Kit Basic Edition v3.3 for Windows® NT/2000/XP (128-byte I/O)

**ADVANTECH** **Distributed DA&C Systems**