# ADAM-5000/485
# ADAM-5000E

## Introduction

The ADAM-5000/485 and ADAM-5000E systems conform to the EIA RS-485 communication standard. This is the industry’s most widely used, balanced, bidirectional transmission line standard. RS-485 was specifically developed for industrial applications to transmit and receive data at high rates over long distances.

## Specifications

### Control System

- **CPU**: 16-bit 80188 microprocessor
- **I/O Slots**: ADAM-5000/485: 4; ADAM-5000E: 8
- **LED Indicators**: Power, CPU, communications
- **Watchdog Timer**: 1.6 sec. (System)

### Communications

- **Command Format**: ASCII command/response protocol, Modbus/RTU
- **Communication Distance**: RS-485: 1.2 km (4000 feet)
- **Data Format**: Asynchronous, 1 start bit, 8 data bits, 1 stop bit, no parity
- **Network Protocols**: Programming link: RS-232 (3-wire: TX, RX, GND); Communication: RS-485 (2-wire)
- **Reliability Check**: Communication error checking with checksum
- **Max. Nodes**: 128 (in RS-485 daisy-chain network)
- **Speeds (kbps)**: 1.2, 2.4, 4.8, 9.6, 19.2, 38.4, 57.6, and 115.2

### Power

- **Power Consumption**: 3 W @ 24 VDC (ADAM-5000/485) (not including I/O modules)
- **Power Input**: Unregulated 10 – 30 VDC

### Software

- **Driver Support**: Windows DLL, OPC Server, Wonderware InTouch, Intellution, iFIX, Citect, Advantech Studio, ADAMView
- **C and .NET Class Library**

## Protection

- **Communication Line Isolation**: 2,500 VDC (ADAM-5000/485)
- **I/O Module Isolation**: 3,000 VDC (ADAM-5000E)
- **Transient Protection**: RS-485 communication lines, power input
- **Power Reversal Protection**: Yes

### General

- **Certification**: CE, FM
- **Connectors**: 1 x DB9-M/DB9-F/screw terminal for RS-485 (communication); 1 x DB9-F for RS-232 (configuration); 1 x Screw-terminal for power input
- **Dimensions (WxHxD)**: 4-slot: 231 x 110 x 75 mm; 8-slot: 355 x 110 x 75 mm
- **Enclosure**: ABS+PC
- **Mounting**: DIN-rail, wall, rack (with mounting kit)
- **Humidity**: 5 – 95%, non-condensing
- **Operating Temperature**: -10 – 70°C (14 – 158°F)
- **Storing Temperature**: -25 – 85°C (-13 – 185°F)

## Ordering Information

- **ADAM-5000/485**: 4-slot Distributed DA & C System for RS-485
- **ADAM-5000E**: 8-slot Distributed DA & C System for RS-485

All product specifications are subject to change without notice. Last updated: 27-Jul-2016