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
- 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)
  4.0 W @ 24 Vdc (ADAM-5000E) (not including I/O modules)
- Power Input Unregulated 10 – 30 Vdc

Software
- Driver Support Windows DLL, OPC Server, Wonderware InTouch, Intellitech, IFIX, Citect, Advantech Studio, ADAMView
- C and .NET Class Library

Protection
- Communication Line Isolation 2,500 Vdc (ADAM-5000/485)
  3,000 Vdc (ADAM-5000E)
- I/O Module Isolation 3,000 Vdc
- 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)

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

Features
- RS-485 communication for easy installation and networking
- 4 or 8 slots for up to 128 points data monitoring card control in one module
- Extensive software support, includes windows DLL drivers, OCX drivers, ODBC server and popular HMI/SCADA software drivers
- Seamlessly integrated with easy-to-use ADAMView data acquisition software
- Supports ADAM ASCII protocol or Modbus ® /RTU protocol
- Supports Modbus/RTU protocol with user-defined Modbus address