ADAM-5000/485
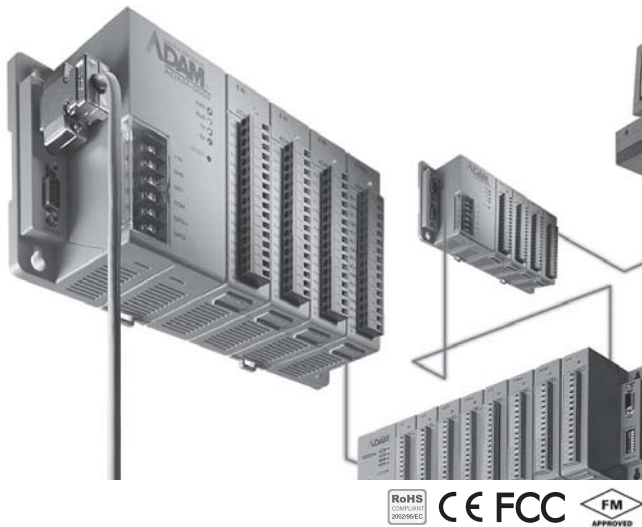# ADAM-5000E

4-slot Distributed DA&C System for RS-485

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, OPC 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

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 V_{DC} (ADAM-5000/485)
  (not including I/O modules)
  4.0 W @ 24 V_{DC} (ADAM-5000E)
  (not including I/O modules)
- **Power Input** — Unregulated 10 ~ 30 V_{DC}

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 V_{DC} (ADAM-5000/485)
  3,000 V_{DC} (ADAM-5000E)
- **I/O Module Isolation** — 3,000 V_{DC}
- **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

Remote DA&C Systems: ADAM-5000

All product specifications are subject to change without notice.   Last updated: 27-Jun-2018