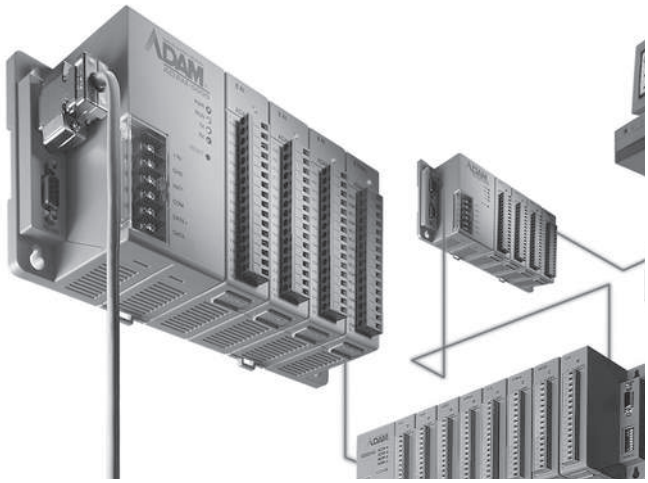
ADAM-5000/485
ADAM-5000E

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

All product specifications are subject to change without notice.