

ADAM-4570S ADAM-4571S

2-port Ethernet to RS-422/485 Data Gateway w/Security

1-port Ethernet to RS-422/485 Data Gateway w/Security



Introduction

The ADAM-4570S/4571S is an advanced security data gateway that works between RS-422/485 and Ethernet interfaces. It not only upgrades your existing RS-422/485 devices to Ethernet, but also provides a quick and safe way to transmit important data via Ethernet. The ADAM-4570S/4571S is specially designed for highly-secured data transmission for remotely controlling and monitoring mission critical application environments.

Advanced security features

Advanced multiple security features protect the system and make data more private and secure. The ADAM-4570S/4571S guards your system and data in several ways: T-DES (Triple Data Encryption Standard); IP address control and configuration. By using T-DES, you can key-in passwords to secure your data. The data cannot be accessed by others host PC unless the PC have the correct password. This prevents important data from being accessed by an unauthorized user. IP address control can block access to a specific ADAM-4570S; it restricts the access right of up to 32 PCs at one time. In addition to these features, the ADAM-4570S/4571S also protects all configuration settings from being changed inadvertently. When this option is enabled, only the corresponding PC can set the configuration. These functions were all designed with data protection and security in mind as well as overall system reliability.

Host/Device Communication Redundancy empowers the reliability of system (ADAM-4570S)

For improving the stability of systems, users usually have to spend lots of effort to build up "Redundant" functionality. Now, the ADAM-4570S provides new powerful functions that help users build up redundant systems fast and easily. The new functions are Host idle & Device idle. The purpose of the "Host idle switch" function is to prevent system hang-up from occurring due to application program failure. If the application program fails, the ADAM-4570S will cut off the connection between the host PC and the ADAM-4570S. Another PC can then start to access the same ADAM-4570S. Also, if the serial device or communication between the device and the ADAM-4570S fails, the "Device Idle" function will switch the communication port from one port to another port to keep communication with another device automatically. Thus, another device can send data to the ADAM-4570S.

Auto-reconnect after networking breaks

The ADAM-4570S/4571S provides an "Auto-reconnect" function to solve networking breaks problem. When the ADAM-4570S/4571S is powered-off accidentally, the driver will keep trying to reconnect the ADAM-4570S/4571S automatically. When the ADAM-4570S/4571S is

Features

- Supports 10/100 Base-T standard
- 2,000 V_{RMS} isolation for RS-422/485 port
- Provides Host/Device Idle protection & auto-reconnection function to enhance the reliability of system.
- Supports multiple advanced security protections: Triple DES, IP address control
- Transmission speed up to 230 Kbps
- Remote download firmware: Easy to maintain
- Auto-detecting Configuration Utility
- Easy-managing Port Mapping Utility
- Supports Windows® NT/2000/XP driver
- Automatic RS-485 data flow control

powered-on again, through this auto-reconnect function, the host PC can send commands to the ADAM-4570S/4571S immediately. This function enhances the reliability of the system.

Specifications

- **Protocol:** UDP, TCP/IP, ICMP
- **Network:** 10/100 BASE-T standard
- **Port:** 1/2 Independent RS-422/485 ports
- **Connector:**
 - Network: RJ-45
 - Serial: RJ-48 (RJ-48 to DB-9 cable provided)
- **Security:** T-DES (FIPS PUB 46-2), IP address control
- **Data Protection type:** Host idle; device idle, auto-reconnection
- **Transmission speed:** 300 bps to 230 Kbps
- **Isolation:** 2,000 V_{RMS}
- **Parity bit:** odd, even, none, space, mark
- **Data bit:** 5, 6, 7, 8
- **Stop bit:** 1, 1.5, 2
- **Diagnostic LEDs:**
 - Network: Tx/Rx, Link, Speed (10/100 Mbps), Power
 - Serial: Tx/Rx, Status
- **Driver Supported:** Windows NT/2000/XP
- **Power Requirements:** unregulated 10 to 30 V_{DC}
- **Power Consumption:** 2 Watt (ADAM-4571S);
4 watt (ADAM-4570S)
- **Mounting:** DIN-rail, panel mounting, piggyback stack
- **Operating Temperature:** 0 to 60° C (32° ~ 140° F)
- **Storage Temperature:** -20 to 80° C (-4° ~ 176° F)
- **Operating Humidity:** 20 to 95% (non-condensing)
- **Storage Humidity:** 0 to 95% (non-condensing)

Ordering Information

- **ADAM-4571S**
1-port Ethernet to RS-422/485 Data Gateway w/Security (includes RJ48 to DB9 cable, 1 m)
- **ADAM-4570S**
2-port Ethernet to RS-422/485 Data Gateway w/Security (includes RJ48 to DB9 cable, 1 m)
- **Opt1A**
30 cm RJ48 to male RS-422/485/422/485 cable