

## VK224

4-Port Serial Expansion Box



The VK224 provides Ethernet-to-serial connectivity with 4 bi-directional RS-232 / 422 / 485 serial ports. It allows users to remotely access serial devices from a PC or any system located anywhere. The complete Telnet CLI commands are fully integrated into users' commercial and industrial applications.

What's more, the VK224 serves as a flexible expansion box of the ATEN Control System, enabling users to control additional serial devices through an ATEN controller in any environments where more serial devices are required. With the advantage of Ethernet-based connection, the expansion box can be easily connected to controllers via LAN connection from a variety of locations across a network.

#### Accessories:

\*The power adapter for this product is sold separately. For more information about this accessory, see [Accessories](#).

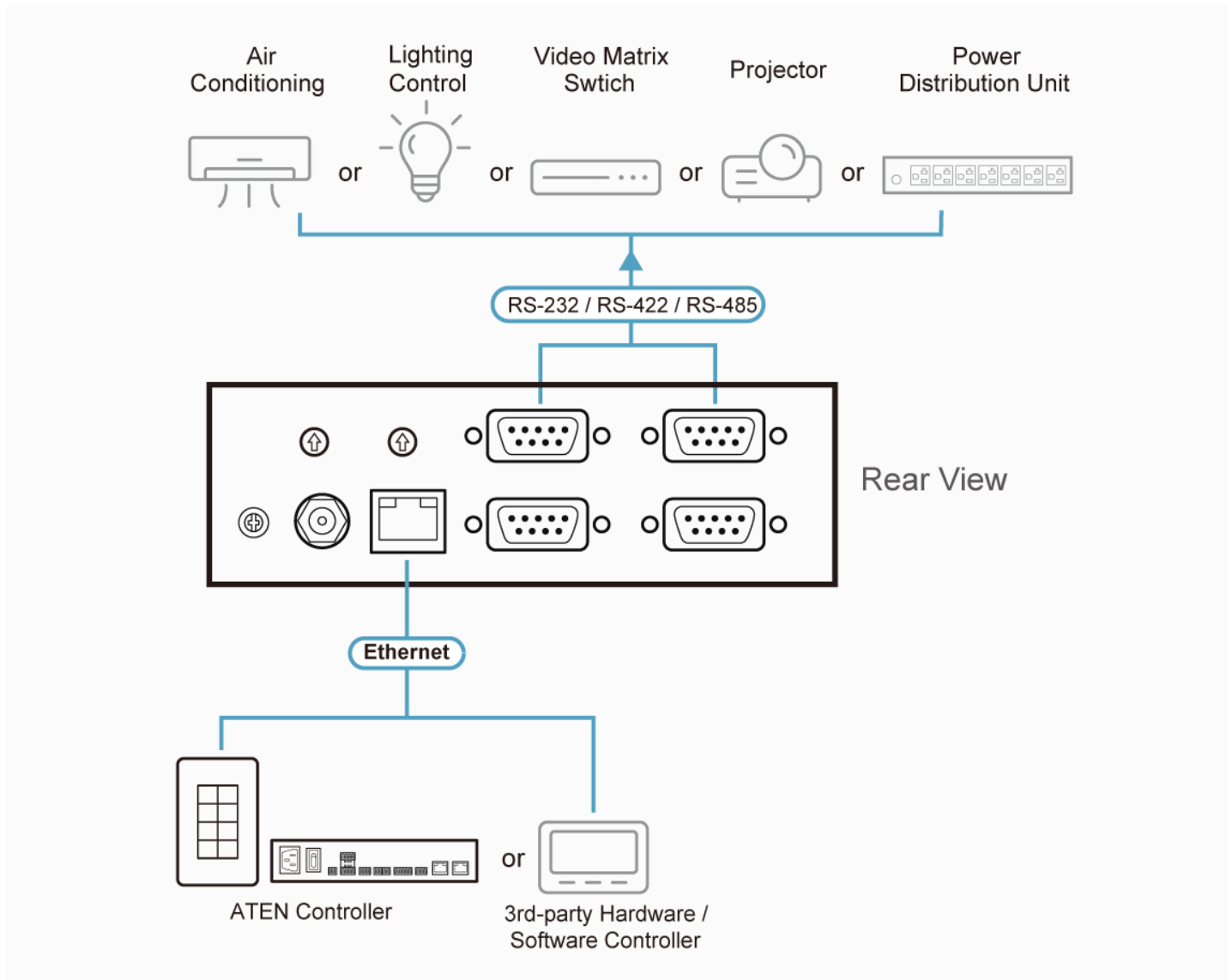
#### Features

- An Ethernet-to-serial box ships with 4 bi-directional RS-232/422/485 serial ports
- Supports Power over Ethernet (PoE) or DC power supply
- Supports Modbus protocol - enables integration with Modbus devices, including TCP, RTU and its checksum data
- Supports Telnet CLI (command-line interface) mode for third-party system integration
- WebUI provides VK224 system information, including firmware upgrade
- An expansion solution for connecting more serial devices to ATEN Control System
- Flexible deployment via Ethernet connection
- Works with a connected ATEN controller with ID Switch through instant configuration

Specification

| Interfaces             |  |   |        |        |          |           |         |          |            |          |            |            |             |            |            |   |            |            |  |
|------------------------|--|---|--------|--------|----------|-----------|---------|----------|------------|----------|------------|------------|-------------|------------|------------|---|------------|------------|--|
| Serial                 | <ul style="list-style-type: none"> <li>• 4 x Programmable Bi-directional RS-232/422/485 Port (4 x DB9 Male Connector, configurable via pin assignments);               <ul style="list-style-type: none"> <li>– Baud Rate: 300 to 115200 (default: 9600);</li> <li>– Data Bit: 8 (default) or 7;</li> <li>– Stop Bit: 1 (default) or 2;</li> <li>– Parity: None (default), Even or Odd;</li> <li>– Flow Control: None (default) RTS/CTS</li> </ul> </li> </ul> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 33%;">RS-232</th> <th style="width: 33%;">RS-422</th> <th style="width: 33%;">RS-485</th> </tr> </thead> <tbody> <tr> <td>Pin2: RX</td> <td>Pin 1:RX-</td> <td>Pin3:D+</td> </tr> <tr> <td>Pin3: TX</td> <td>Pin 2: RX+</td> <td>Pin 4:D-</td> </tr> <tr> <td>Pin 5: GND</td> <td>Pin 3: TX+</td> <td>Pin 5: GND*</td> </tr> <tr> <td>Pin 7: RTS</td> <td>Pin 4: TX-</td> <td>Note: A ground terminal connection is recommended but not required.</td> </tr> <tr> <td>Pin 8: CTS</td> <td>Pin 5: GND</td> <td></td> </tr> </tbody> </table> | RS-232  | RS-422 | RS-485 | Pin2: RX | Pin 1:RX- | Pin3:D+ | Pin3: TX | Pin 2: RX+ | Pin 4:D- | Pin 5: GND | Pin 3: TX+ | Pin 5: GND* | Pin 7: RTS | Pin 4: TX- | Note: A ground terminal connection is recommended but not required. | Pin 8: CTS | Pin 5: GND |  |
| RS-232                 | RS-422   | RS-485  |        |        |          |           |         |          |            |          |            |            |             |            |            |   |            |            |  |
| Pin2: RX               | Pin 1:RX-  | Pin3:D+   |        |        |          |           |         |          |            |          |            |            |             |            |            |   |            |            |  |
| Pin3: TX               | Pin 2: RX+   | Pin 4:D-  |        |        |          |           |         |          |            |          |            |            |             |            |            |   |            |            |  |
| Pin 5: GND             | Pin 3: TX+   | Pin 5: GND*   |        |        |          |           |         |          |            |          |            |            |             |            |            |   |            |            |  |
| Pin 7: RTS             | Pin 4: TX-   | Note: A ground terminal connection is recommended but not required. |        |        |          |           |         |          |            |          |            |            |             |            |            |   |            |            |  |
| Pin 8: CTS             | Pin 5: GND   |   |        |        |          |           |         |          |            |          |            |            |             |            |            |   |            |            |  |
| Ethernet               | <ul style="list-style-type: none"> <li>• 1 x RJ-45 Female, 10/100Base-T</li> <li>• Supported Protocol: ARP, ICMP, TCP/IP, DHCP, HTTPS, SSH</li> <li>• DHCP-enabled. The following default IP settings will be used if no IP is assigned within 30 seconds:<br/>IP: 192.168.0.60<br/>Subnet Mask: 255.255.255.0</li> </ul>  |   |        |        |          |           |         |          |            |          |            |            |             |            |            |   |            |            |  |
| Switches               |  |   |        |        |          |           |         |          |            |          |            |            |             |            |            |   |            |            |  |
| Controller ID          | 1 x 16-segment Switch  |   |        |        |          |           |         |          |            |          |            |            |             |            |            |   |            |            |  |
| Expander ID            | 1 x 8-segment Switch   |   |        |        |          |           |         |          |            |          |            |            |             |            |            |   |            |            |  |
| Reset Button           | 1 x Semi-recessed Pushbutton   |   |        |        |          |           |         |          |            |          |            |            |             |            |            |   |            |            |  |
| USB                    | 1 x USB Type A   |   |        |        |          |           |         |          |            |          |            |            |             |            |            |   |            |            |  |
| Power Consumption      | DC5V:3.8W:28BTU/h<br>DC48V:4.75W:33BTU/h<br><br>Note: <ul style="list-style-type: none"> <li>● The measurement in Watts indicates the typical power consumption of the device with no external loading.</li> <li>● The measurement in BTU/h indicates the power consumption of the device when it is fully loaded.</li> </ul>  |   |        |        |          |           |         |          |            |          |            |            |             |            |            |   |            |            |  |
| Environmental          |  |   |        |        |          |           |         |          |            |          |            |            |             |            |            |   |            |            |  |
| Operating Temperature  | 0 – 50°C   |   |        |        |          |           |         |          |            |          |            |            |             |            |            |   |            |            |  |
| Storage Temperature    | -20 – 60°C   |   |        |        |          |           |         |          |            |          |            |            |             |            |            |   |            |            |  |
| Humidity               | 0 - 80% RH, Non-Condensing   |   |        |        |          |           |         |          |            |          |            |            |             |            |            |   |            |            |  |
| Physical Properties    |  |   |        |        |          |           |         |          |            |          |            |            |             |            |            |   |            |            |  |
| Housing                | Metal  |   |        |        |          |           |         |          |            |          |            |            |             |            |            |   |            |            |  |
| Weight                 | 0.45 kg ( 0.99 lb )  |   |        |        |          |           |         |          |            |          |            |            |             |            |            |   |            |            |  |
| Dimensions (L x W x H) | 13.00 x 7.58 x 4.20 cm<br>(5.12 x 2.98 x 1.65 in.)   |   |        |        |          |           |         |          |            |          |            |            |             |            |            |   |            |            |  |
| Note                   | For some of rack mount products, please note that the standard physical dimensions of WxDxH are expressed using a LxWxH format.  |   |        |        |          |           |         |          |            |          |            |            |             |            |            |   |            |            |  |

Diagram



**ATEN International Co., Ltd.**

3F, No.125, Sec. 2, Datong Rd., Sijhih District., New Taipei City 221, Taiwan  
 Phone: 886-2-8692-6789 Fax: 886-2-8692-6767  
 www.aten.com E-mail: marketing@aten.com



© Copyright 2015 ATEN® International Co., Ltd.  
 ATEN and the ATEN logo are trademarks of ATEN International Co., Ltd.  
 All rights reserved. All other trademarks are the property of their  
 respective owners.