

# 4-Port Serial Expansion Box

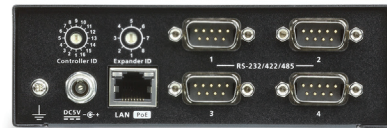
## VK224

- The VK224 4-Port Serial Expansion Box provides four additional bi-directional RS-232 / 422 / 485 serial ports for a flexible expansion of the ATEN Control System. This allows users to control additional serial devices in an environment where more serial devices are required. With the advantage of an Ethernet-based connection, the expansion box can be easily connected to the VK2100 Control Box via a LAN connection from a variety of locations across a network.

Front view



Rear view



## Features

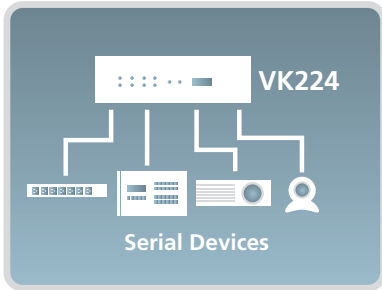
- Provides 4 bi-directional RS-232/422/485 serial ports to expand the ATEN Control System
- Up to eight VK224 expansion boxes can be added to a single VK2100 Control Box
- Flexible Deployment: Connects to a VK2100 Control Box via an Ethernet connection
- ID Switch pairs the VK224 with a controller to instantly configure the network settings
- Supports Power over Ethernet (PoE) or DC power supply
- Firmware upgradable through USB or Web interface

## Highlights

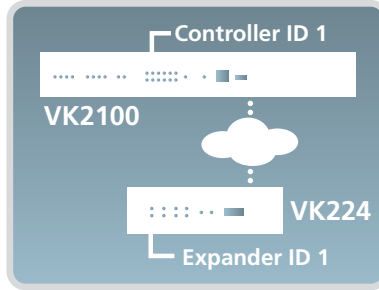
<b>PoE Single Cable Installation</b>	The VK224 is built with PoE which supplies power through the same Ethernet cable that connects it to the LAN – eliminating the need of an extra power source and extra wiring. In addition, the VK224 can be powered via a 5 VDC power adapter.
<b>Expansion via Ethernet</b>	With an Ethernet-based connection, the expansion boxes easily install close to the devices you need to control – anywhere across a network to the VK2100 Control Box. This provides a simple, full-proof solution for you to add device ports anywhere you need them.

# Installation Setup

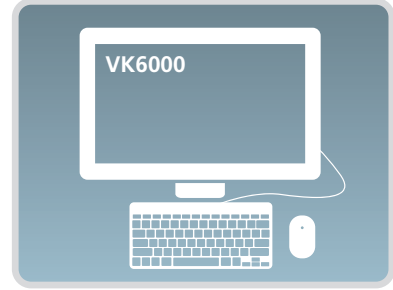
## Connect Hardware



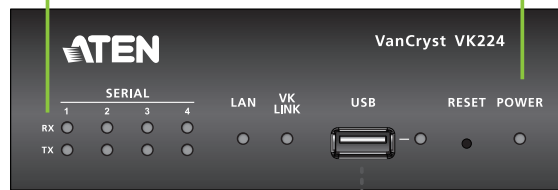
## Set ID Switches



## Software Configuration



LED indicators for hardware and connection status

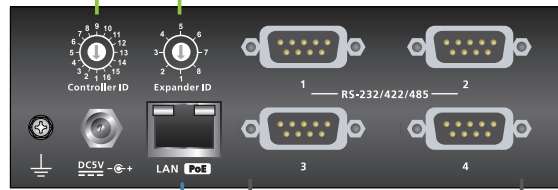


VK224 (Front)

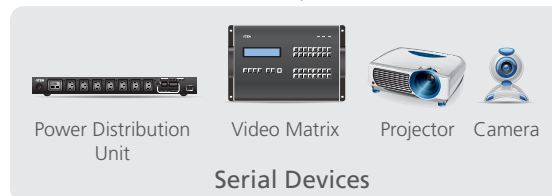
USB port for easy firmware upgrades

VK2100 ID Switch

VK224 ID Switch



VK224 (Rear)



- USB
- Ethernet
- Serial

# Specifications

Function	VK224																		
<b>Interfaces</b>																			
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);</li> <li><b>Baud Rate:</b> 300 to 115200 (default: 9600)</li> <li><b>Data Bit:</b> 8 (default) or 7</li> <li><b>Stop Bit:</b> 1 (default) or 2</li> <li><b>Parity:</b> None (default), Even or Odd</li> <li><b>Flow Control:</b> None (default) RTS/CTS</li> </ul>																		
	<b>Pin Assignments</b>																		
	<table border="1"> <thead> <tr> <th>RS-232</th> <th>RS-422</th> <th>RS-485</th> </tr> </thead> <tbody> <tr> <td>Pin 2: RX</td> <td>Pin 1: RX-</td> <td>Pin 3: D+</td> </tr> <tr> <td>Pin 3: 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>-</td> </tr> <tr> <td>Pin 7: RTS</td> <td>Pin 4: TX-</td> <td>-</td> </tr> <tr> <td>Pin 8: CTS</td> <td>Pin 5: GND</td> <td>-</td> </tr> </tbody> </table>	RS-232	RS-422	RS-485	Pin 2: RX	Pin 1: RX-	Pin 3: D+	Pin 3: TX	Pin 2: RX+	Pin 4: D-	Pin 5: GND	Pin 3: TX+	-	Pin 7: RTS	Pin 4: TX-	-	Pin 8: CTS	Pin 5: GND	-
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Pin 8: CTS	Pin 5: GND	-																	
Ethernet	<ul style="list-style-type: none"> <li>1 x RJ-45 Female, 10/100 Base-T</li> <li>Supported Protocol: 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:</li> <li><b>IP:</b> 192.168.0.60</li> <li><b>Subnet Mask:</b> 255.255.255.0</li> </ul>																		
<b>Switches</b>																			
Controller ID	1 x 16-segment Switch																		
Expander ID	1 x 8-segment Switch																		
<b>Reset Button</b>	1 x Semi-recessed Pushbutton																		
<b>USB</b>	1 x USB Type A (Firmware upgrade only)																		
<b>Power</b>																			
Consumption	5 VDC, 7.5 W (adapter) ; 48 VDC, 9.5 W (PoE, PoE 802.3 AF/AT compatibility)																		
Output	5 VDC, 1.2 A																		
<b>Environmental</b>																			
Operating Temperature	0° to 50° C																		
Storage Temperature	-20° to 60° C																		
Humidity	0 - 80% RH, Non-Condensing																		
<b>Physical Properties</b>																			
Housing	Metal																		
Weight	0.45 kg																		
Dimensions (L x W x H)	13.00 x 7.60 x 4.20 cm																		

