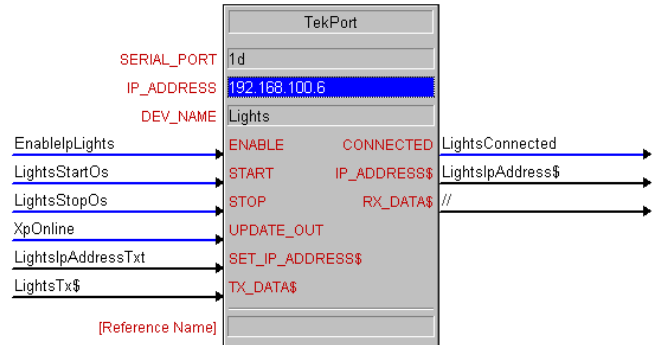


It is common in large multimedia systems to have more serial-controlled devices than the control system has actual serial ports. With Crestron™ control systems, you may need to use an AV2-PRO or add several ST-COMs. These large control systems can become very expensive. A project may only require a few serial-controlled devices, and to save money, you install a small Crestron MC2e or AMX NI-2100 controller. At some point during the installation, your customer may wish to add video-conferencing and camera control to this system, but be left with no open serial ports on the controller. This leaves you with the choice of changing out the controller, or adding an expensive Crestron ST-COMs or AMX NXC-COM2.

TEKVOX however, has a better solution, the TekPort Device Server allows you to add eight or sixteen serial ports in a single 1RU device to a Crestron™ or AMX™ control system. The TekPort connects to the control system via Ethernet and is easy to install and program. Configuring a TekPort only requires the setting of its IP address. TEKVOX also provides your programmer with simple-to-use modules for both AMX and Crestron. The Crestron module effectively takes the place of the serial port connections that is typically set in the Central Control Modules. With the Crestron TekPort module, there is no need to add an Ethernet TCP/IP-Client or set IP tables or ports; simply select which serial port you want to communicate with on the TekPort. With AMX, it may be more difficult since most modules are written to communicate with the device. It is best to include the TCP/IP connection in your device module.



Benefits

- Low cost serial port expansion
- Easy setup, configuration and programming
- High speed LAN connection
- Allows for smaller controllers
- Allows for extended distances



The TekPort is made by MOXA and is preconfigured to work with AMX and Crestron modules supplied by TEKVOX. On the front of the TekPort is a menu driven LCD and keypad which allows for easy configuration of the network settings. The following are preconfigured settings from TEKVOX:

- Network settings: DHCP
- Serial Port setting: 9600 baud, 8-bit, 1 stop bit, no parity, and no flow control.
- Web server password: **TekPort01**

Since the TekPort is preconfigured from TEKVOX, the only required settings are the network and serial port. These settings can easily be made through the TekPort web server or front panel LCD. Note that the web server is password protected from TEKVOX (TekPort01).

TekPort Configuration Models

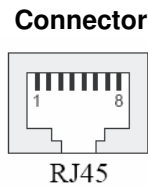
TekPort 5610-8	8 Port RS-232	TekPort 5650-8	8 Port RS-232/RS-422/RS-485
TekPort 5610-16	16 Port RS-232	TekPort 5650-16	16 Port RS-232/RS-422/RS-485

• Serial Communication Parameters

Data Bits	5, 6, 7, 8
Stop Bits	1, 1.5, 2
Parity	None, Even, Odd, Space, Mark
Flow Control	DSR/DTR and RTS/CTS (RS-232 only), XON/XOFF
Baud rate	50 bps to 921.6 Kbps

• Serial Interface

Serial Standards	RS-232/422/485
Number of Ports	8 or 16
Connectors	RJ45 (8 pins)
Serial Line Protection	15 KV ESD protection for all signals
RS-485 Data Direction	ADDC® (automatic data direction control)
Control	



Pin	RS-232	RS-422 4-wire	RS-485	2-wire RS-485
1	DSR	---	---	---
2	RTS	TxD+	---	---
3	GND	GND	GND	GND
4	TxD	TxD-	---	---
5	RxD	RxD+	Data+	Data+
6	DCD	RxD-	Data-	Data-
7	CTS	---	---	---
8	DTR	---	---	---

RS-232
Tip:

Wiring

Most RS-232 devices have a DC voltage on their transmit pin. If you wire the device you want to control first (pins 2, 3 & 5), and then check for voltage between pin 5 (ground) and the other wires, the wire that has voltage should go to the controller's receive connection. Pin 5 is for the TekPort RJ45 RX while Pin 2 is RX for DB 9 male connectors such as AMX and Crestron,



Environmental Limits

Operating Temperature	0 to 55°C (32 to 131°F)
Operating Humidity	5 to 95% RH
Storage Temperature	-20 to 75°C (-4 to 167°F)

Software

Network Protocols	ICMP, IP, TCP, UDP, DHCP, BOOTP, Telnet, DNS, SNMP, HTTP, SMTP, SNTP, ARP, PPP, SLIP, RTelnet, RFC2217
Driver Support	Windows Real COM driver (for Windows 95, 98, ME, NT, 2000, XP, 2003, Vista, XP x64, 2003 x64, Vista x64), Linux Real TTY driver, Fixed TTY driver (for SCO Unix, SCO OpenServer, UnixWare 7, UnixWare 2.1, SVR 4.2, QNX 4.25, QNX 6, Solaris 10, FreeBSD, AIX 5.x, HP-UX 11i)
Configuration Options	Web Console, Telnet Console, Windows Utility

Physical Characteristics

Enclosure	SECC sheet metal (1 mm), providing IP30 protection
Weight	NPort® 5650-8: 3360 g NPort® 5650-8-S-SC: 3380 g NPort® 5650-8-M-SC: 3380 g NPort® 5650-16: 3460 g NPort® 5650-16-S-SC: 3440 g NPort® 5650-16-M-SC: 3440 g
Dimensions	Without ears: 440 x 45 x 198 mm (17.32 x 1.77 x 7.80 in) With ears: 480 x 45 x 198 mm (18.90 x 1.77 x 7.80 in)

Power Requirements

Input Voltage	100 to 240 VAC, 47 to 63 hz
Power Consumption	NPort® 5650-8/16: 158 mA @ 100 VAC, 102 mA @ 240 VAC

Power Line Protection NPort® 5650-8/16-S-SC: 164 mA @ 100 VAC, 110 mA @ 240 VAC
NPort® 5650-8/16-M-SC: 174 mA @ 100 VAC, 113 mA @ 240 VAC
4 KV burst (EN61000-4-4: EFT/B), 2 KV surge (EN61000-4-5)

Regulatory Approvals

Safety UL (UL60950-1), TÜV (EN60950-1)
EMC CE (EN55022 Class A, EN55024), FCC Part 15 Subpart B Class A
Medical EN60601-1-2 Class B, EN55011

Reliability

Alert Tools Built-in buzzer and RTC (real-time clock)
Automatic Reboot Trigger Built-in WDT (watchdog timer)
MTBF (meantime between failures) NPort® 5650-8: 117584 hrs
NPort® 5650-16: 104767 hrs
NPort® 5650-S-SC-8: 116914 hrs
NPort® 5650-S-SC-16: 87528 hrs
NPort® 5650-M-SC-8: 116914 hrs
NPort® 5650-M-SC-16: 87528 hrs

Warranty

Warranty Period 5 years

