

# IPL T S2, IPL T S4, & IPL T S6

IP Link Ethernet-to-Serial Interfaces with Two, Four, and Six Serial Ports





IPL T S2



IPL T S4



IPL T S6



## DESCRIPTION

The new Extron **IPL T S2**, **IPL T S4**, and **IPL T S6** are compact Ethernet-to-serial interfaces with integral Web servers that enable almost any A/V device to be controlled, monitored, and accessed from any computer connected to a Local Area Network (LAN) or the Internet. IP (Internet Protocol) connectivity gives users the ability to remotely and proactively monitor and troubleshoot projectors, plasma displays, switchers, and other serially controlled (RS-232/422/485) products. The IP Tools Series uses Extron's IP Link™ technology, a high-performance IP integration solution specifically engineered to meet the needs of professional A/V environments, from universities and businesses to home installations.

The IP Tools models use an integrated, high performance Web server with 1.25 MB of flash memory for storing HTML, JavaScript, Flash™ animation, and graphics files. Customizable Web pages can be created and stored using off-the-shelf software programs, such as Macromedia® Dreamweaver® and Microsoft® FrontPage®. Using intuitive Web-based software with a Graphical User Interface (GUI), users can access a variety of A/V products connected to a network. For example, users can check the activity and status of a projector's power, connections, lamp life, or temperature.

Proactive service, support, and preventive maintenance are also possible with IP Tools. With e-mail notification, technical support administrators can receive failure and service messages through an e-mail enabled cell phone, PDA, pager, or Internet e-mail account. For secure installations that do not allow Internet access, online monitoring can still be performed proactively. Within an existing secure infrastructure, e-mail notification of failures and repairs is possible without compromising the security of the A/V systems and facility.

There are three IP Tools Ethernet-to-Serial interface models: IPL T S2, IPL T S4 and IPL T S6. The only difference between the three models is the number of serial ports. Various models feature 9-pin D-sub serial ports and/or captive screw terminal serial ports, allowing for easy connection to a variety of devices. The 9-pin D-sub serial ports offer RS-232, RS-422 and RS-485 compatibility, while the captive screw terminals support RS-232.

**IPL T S2** – The IPL T S2 features two 9-pin D-sub serial ports that can control two RS-232, RS-422 or RS-485 serial devices directly. When configured for pass-through mode, the IPL T S2 can pass through commands from an existing control system and control a single device. The IPL T S2 also includes two captive screw serial ports that are connected in parallel with the 9-pin serial ports.

**IPL T S4** – The IPL T S4 features four 9-pin D-sub serial ports that can control four RS-232, RS-422 or RS-485 serial devices. When configured for pass-through mode, the IPL T S4 can pass through commands from an existing control system and control two different devices.

**IPL T S6** – The IPL T S6 features two 9-pin D-sub serial ports that can control two RS-232, RS-422 or RS-485 serial devices directly and four captive screw serial ports that can control four additional RS-232 devices. When configured for pass-through mode, the IPL T S6 can pass through commands from an existing control system and control three different devices.

## FEATURES

- **Powerful scripting capability** – All IP Link products are capable of running sophisticated user-programmable scripts. This feature enables automated functions to operate based on assignable criteria such as turning connected equipment on or off at predetermined times and alerting individuals if an attached unit is stolen or goes offline.
- **Global compatibility** – All IP Tools models use industry standard Ethernet communication protocols, including ARP, DHCP, ICMP (ping), TCP/IP, Telnet, HTTP, and SMTP.
- **High performance architecture** – Web pages are served up to 50 times faster (6 Mbit/sec transfer rate) than many similar products, so data is refreshed at a consistently high speed.
- **Multi-user support** – 200 simultaneous connections enable each IP Link device to support many concurrent users and improve system throughput by sending information in parallel.
- **IP Link Global Viewer** – The included management application software allows the user to control, monitor, and schedule various functions of serially controlled products connected to IP Tools products.
- Two levels of security with password protection – User access level authorizes limited entry to only pre-designated functions, while administrator access level permits full access to advanced settings.
- **Real-time clock** – Programmable operating alerts, sequencing, and automatic monitoring with the internal real-time clock and calendar allow the IP Tool to routinely check a device.
- **Configuration utility** – A supplied Windows® based configuration utility makes product setup simple and easy. Drivers for a wide variety of projectors and Extron A/V products are available for download from the Extron web site ([www.extron.com](http://www.extron.com)).
- **Bi-directional serial ports** – The IP Tool can control at least two separate serial (RS-232/422/485) devices, or can be inserted into existing A/V systems without losing the ability to use a local control system.
- **Power options** – For added reliability, users can power up the IP Tool two different ways. With the power over LAN (IEEE 802.3af) option, there is no need for a local power supply. The included external, international power supply provides worldwide power compatibility.
- **Versatile mounting options** – The IP Tools models come in a quarter rack width, 1U high metal enclosure and are rack, under-desk, and projector-mountable.
- External international power supply included (part # 70-055-01, see page 439)

## MODEL

IPL T S2 (Two Serial Ports)

IPL T S4 (Four Serial Ports)

IPL T S6 (Six Serial Ports)

## PART #

60-544-01

60-544-03

60-544-04



# IPL T S2, IPL T S4, & IPL T S6 (continued)...

## OPTIONAL ACCESSORIES

- VersaTools Rack Shelf Kit .....60-190-20 (page 445)
- 1U 19" Rack Shelf Kit .....60-190-01 (page 445)
- Under Desk Mount .....70-077-01 (page 442)
- Mini Projection Mount Kit .....70-217-01 (page 442)

## SPECIFICATIONS

### SERIAL CONTROL INTERFACE

Port number/type	
IPL T S2.....	2 RS-232/RS-422/RS-485 configurable serial
IPL T S4.....	4 RS-232/RS-422/RS-485 configurable serial
IPL T S6.....	2 RS-232/RS-422/RS-485 configurable serial
	4 RS-232-only
Connectors	
IPL T S2.....	(2) 9-pin male D and (1) 3.5 mm 5-pole captive screw connector
IPL T S6.....	(2) 9-pin male D and (1) 3.5 mm 10-pole captive screw connector
IPL T S4.....	(4) 9-pin male D

### ETHERNET CONTROL INTERFACE

Connectors .....	1 RJ-45 male connector
Data rate .....	10/100Base-T, half/full duplex with autodetect
Protocols .....	ARP, DHCP, ICMP (ping), TCP/IP, Telnet, HTTP, SMTP
Default settings .....	Link speed and duplex level = autodetected
	IP address = 192.168.254.254, subnet mask = 255.255.0.0, default gateway = 0.0.0.0
	DHCP = off

### GENERAL

Power .....	100VAC to 240VAC, 50/60 Hz, 10 watts, external, autoswitchable; to 12VDC, 1 A power supply. Product requires 0.5 A.
Rack mount .....	Yes, with optional 1U rack shelf, part #60-190-01, or the VersaTools rack shelf, part #60-190-20; also under-furniture mountable with optional brackets #70-212-01 or projector mountable with optional brackets #70-217-01/70-077-04
Enclosure type .....	Metal
Enclosure dimensions .....	1.7" H x 4.3" W x 3.0" D (1U high, quarter rack width) 4.3 cm H x 10.9 cm W x 7.6 cm D (Depth excludes connectors.)
Product weight .....	0.7 lbs (0.3 kg)
Shipping weight .....	3 lbs (1.4 kg)
Listings/Compliances .....	UL, CUL, CE, FCC Class A, VCCI, AS/NZS, ICES
Warranty .....	3 years parts and labor

## APPLICATIONS

