



● POWER-OVER ETHERNET SWITCH

# Cisco Catalyst Express 500-24PC

PRICE £1,518 exc VAT

WARRANTY Limited lifetime

SUPPLIER Cisco 020 8824 1000

INTERNET www.cisco.co.uk

**VERDICT** Cisco attacks the SMB communications market with a vengeance. Installation and configuration has been streamlined superbly, it offers good value and its management tools easily rival anything offered by competing vendors.

For many years, we've commented on growth in the SMB networking marketplace and the potential it represents to manufacturers large and small. Companies such as 3Com and HP recognised this early on and have produced a range of network infrastructure products to suit smaller pockets. Now, Cisco turns its not inconsiderable gaze on the very same market sector. However, in this exclusive review, you'll see this isn't merely a passing nod to the SMB but a full-on assault, with one of the first complete communications solutions to market.

Traditionally, Cisco's focus has been on the mid-market and enterprise levels. This left smaller businesses with the perception that its product line was a poor choice due to high costs, complexity and an inability to scale down to their level. The new product line represents a complete departure from this philosophy. It's been built from the ground up with the specific aim of targeting businesses ranging from 20 to 250 employees. The Catalyst 500 Series switches provide the foundation, and from this you can build a complete system using Cisco's new ISRs (integrated services routers), IP telephones and call management software.

The Catalyst Express 500-24PC offers 24 802.3af-compliant ports, but PoE prioritisation isn't required, as the 370W supply allows it to deliver 15.4W on all ports simultaneously. Perhaps the most important feature is the lack



Finally, Cisco has launched a range specifically targeting the small-to-medium business.

of a serial port normally provided for access to the CLI. It's a well-known fact that although Cisco's IOS (internetwork operating system) is a powerful feature, it's far too complex for IT staff in SMBs to use. With these new products, Cisco has not only streamlined the installation and configuration process, but simplified it so much that access to the IOS isn't necessary.

On power-up, the switch checks all its ports and flashes one port status indicator to show that it's to be used for direct PC connection. Once linked up, you press the Setup button on the front panel and the switch's DHCP services will assign the PC an IP address. Next, you load a web browser that goes directly to the switch's express setup page, where you can assign a fixed IP address to the default VLAN and secure administrative access. Hit the Submit button and you'll then be presented with Cisco's ace-in-the-hole – its Smartports interface. This allows roles to be assigned to specific ports, and the switch will automatically optimise performance to cater for the attached devices.

Your next step is Device Manager, which offers full access to switch configuration. The homepage provides a detailed switch status overview and the Smartports option allows you to select a port and add a role, which could be a server, switch or desktop connection, an access point, IP phone and desktop, a printer or a guest system. Either way, the switch will automatically configure features such as QoS specifically for the attached device. Diagnostics don't get any better: you can run a basic link test, as the switch uses time domain reflectometry to detect

breaks in cables plus poor or failed connections.

Cisco's Network Assistant (CNA) aims to take the pain out of switch configuration. Setting general network security is simple, as CNA provides a slider bar with three options. A Low setting limits the number of users that can have port access, Medium implements authorisation by a MAC address table and High forces the use of a RADIUS server. The Smartports features really comes into play here, as Cisco devices will be automatically identified on connection and CNA will suggest the best settings for them. Add a Cisco IP phone, and Smartports can suggest and automatically apply QoS parameters to give voice traffic the highest priority. Non-Cisco devices such as servers can

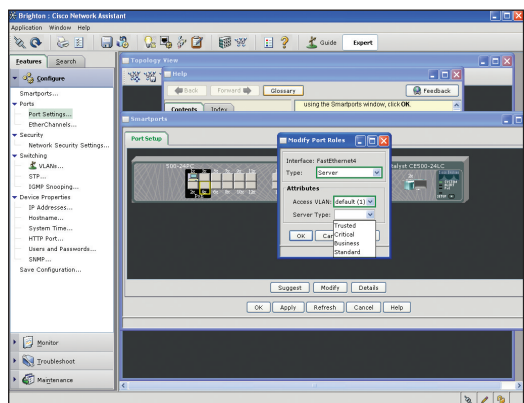
also be given different priorities, as you can assign one of four roles to them that determine how critical they are to business operations.

The guest mode also has many uses. Assigning this role to a port would allow you, for example, to connect an AP to it and isolate all wireless traffic from the main network with just a few mouse clicks.

Cisco hasn't just made its SMB switches easier to use: its new ISRs (integrated services router) and IP phones are also designed with the same philosophy. Adding IP telephony services is remarkably simple. The ISR uses new web-based wizards that can take you from installation to dial tone in 30 minutes, as opposed to eight hours with its higher-end products. Its IP phones can also be integrated simply by using a barcode scanner to register them with the ISR.

During testing, we found the Catalyst switch incredibly easy to install and configure. The Smartports feature makes light work of installing new devices and setting QoS parameters, while strong authentication and port security can be activated with a few mouse clicks. Cisco may have taken a while, but it's clear that the company has woken up to the needs of smaller businesses. It's now placed itself well within the reach of those looking for a complete and affordable network communications solution that can scale easily with demand.

DAVE MITCHELL



CNA and Smartports make light work of configuring ports, security and QoS settings.

PC PRO RATINGS	
PERFORMANCE	★★★★★
FEATURES & DESIGN	★★★★★
VALUE FOR MONEY	★★★★★
OVERALL	★★★★★
<b>SPECIFICATIONS</b> Layer 2 managed switch; 24 x 10/100BaseTX IEEE 802.3af PoE ports; supports Cisco Inline Power (pre-standard); 15.4W per port, max power 370W; 2 x dual-personality ports supporting 1000BaseT or 1000BaseSX/LX mini-GBICs; 8.8sec backplane capacity; 8K MAC address forwarding table; supports 32 x 802.1q VLANs, 802.1p, 802.1w, 802.1x, RADIUS, SSL/HTTPS, SSH; web-based and Cisco Network Assistant management.	