Data Sheet

Cisco ATA 186 Analog Telephone Adaptor

The Cisco ATA 186 Analog Telephone Adaptor is a handset-to-Ethernet adaptor that turns traditional telephone devices into IP devices. Customers can take advantage of the many new and exciting IP telephony applications by connecting their analog devices to Cisco ATAs.

The Cisco Analog Telephone Adaptor products are standards-based communication devices that deliver true, next generation voice-over-IP (VoIP) terminations to businesses and residences worldwide.

PROTECTS LEGACY TELEPHONE INVESTMENT

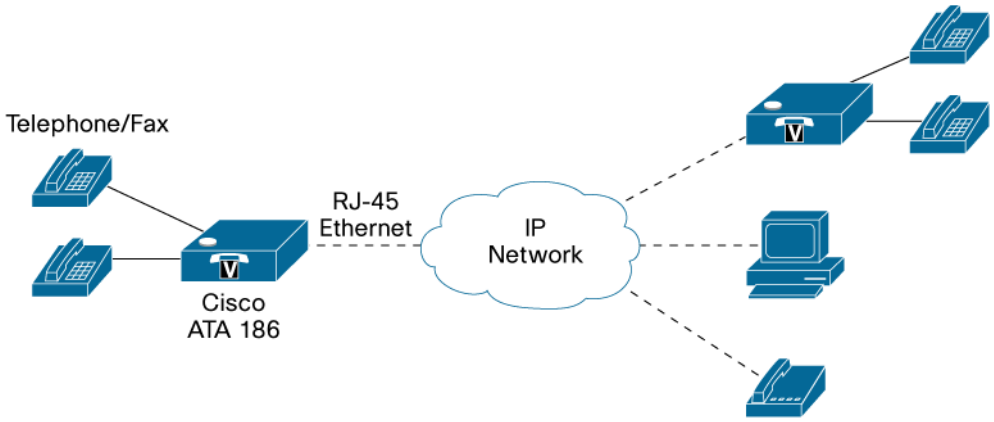
The Cisco ATA 186 supports two voice ports, each with its own independent telephone number, and a single 10BaseT Ethernet port. This adaptor can make use of existing Ethernet LANs, in addition to broadband pipes such as digital subscriber line (DSL), fixed wireless, and cable modem deployments.

COST EFFECTIVE

The Cisco ATA 186 helps customers turn their analog phone devices into IP devices cost-effectively and is the preferred solution to address the needs of customers who connect to either enterprise networks, small-office environments, or the emerging VoIP managed voice services and local services market.

Enterprise customers are using the Cisco ATA 186 to connect analog phones and FAX machines to their VoIP network. Service providers are taking advantage of emerging telephony applications and the ease of deploying second-line services using the Cisco ATA 186.

Figure 1. Cisco ATA 186—Endpoint for an End-to-End Broadband System

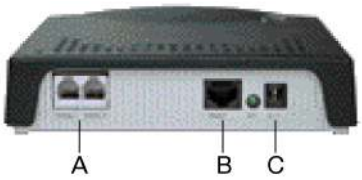


The Cisco ATA 186 allows you to connect analog telephones and faxes to an IP telephony network.

Table 1. Features and Benefits

Features	Benefits
• Two voice ports support legacy (analog) touch tone telephones • RJ 45 connection to 10BaseT Ethernet hub or switch	Connects legacy telephones to IP-based networks
• Auto-provisioning with Trivial File Transfer Protocol (TFTP) provisioning servers • Automatic assignment of IP address, network route IP, and subnet mask via Dynamic Host Configuration Protocol (DHCP) • Web configuration through built-in Web server • Touch-tone telephone keypad configuration with voice prompt • Administration password to protect configuration and access • Remote upgrades through network	Flexible configuration and provisioning options
• Advanced pre-processing to optimize full-duplex voice compression • High performance line-echo cancellation eliminates noise and echo • Voice activity detection (VAD) and comfort noise generation (CNG) save bandwidth by delivering voice, not silence • Dynamic network monitoring to reduce jitter artifacts such a packet loss	Clear, natural-sounding voice quality
• Session Initiation Protocol (SIP) • Skinny Client Control Protocol (SCCP)—Cisco CallManager technology	Supports multiple protocols for interoperability and deployment flexibility
• Fits in most environments	Small form-factor design
• Passwords displayed as asterisks instead of readable text	Enhanced security
• Network status page	Track packet input, output and errors

SYSTEM REQUIREMENTS



A	Regular analog telephones
B	10BaseT category-5 cable to access IP network
C	Power for AC/DC power adaptor

SOFTWARE SPECIFICATIONS

Voice-over-IP (VoIP) Protocols

- SIP (RFC 2543)
- SCCP

Voice Codecs*

- G.729, G.729A, G.729AB2
- G.723.1
- G.711a-law
- G.711µ-law

* In simultaneous dual-port operation, the second port is limited to G.711 when using G.729.

Provisioning and Configuration

- DHCP (RFC 2131)
- Web configuration via built-in Web server
- Touch-tone telephone keypad configuration with voice prompt
- Basic boot provisioning (RFC 1350 TFTP Profiling)
- Dial plan provisioning
- Cisco Discovery Protocol for SCCP

Security

- RC4 encryption for TFTP configuration profiles

Dual-Tone Multi-Frequency (DTMF)

- DTMF tone detection and generation

Out-of-Band DTMF

- RFC 2833 AVT tones for SIP, MGCP, SCCP

Call Progress Tones

- Configurable for two sets of frequencies and single set of on/off cadence

Line-Echo Cancellation

- Echo canceller for each port
- 8 ms echo length
- Nonlinear echo suppression (ERL greater than 28 dB for f = 300 to 3400 Hz)
- Convergence time = 250 ms
- ERLE = 10 to 20 dB
- Double-talk detection

Voice Features

- Voice activity detection (VAD)
- Comfort noise generation (CNG)
- Dynamic jitter buffer (adaptive)

Fax**

- G.711 fax pass-through
- G.711 fax mode

** Success of fax transmissions up to 14.4 kbps depends on network conditions and fax modem/fax machine tolerance to those conditions. Network must have reasonably low network jitter, network delay, and packet loss rate.

PHYSICAL SPECIFICATIONS

Click here http://www.cisco.com/application/pdf/en/us/guest/products/ps514/c1176/ccmigration_09186a008020bcc6.pdf to view the physical product specifications and regulatory compliance information in PDF format.

ORDERING INFORMATION

Table 2. Cisco ATA 186 Analog Telephone Adaptors

Description	Part Number
Cisco ATA 186 with 600 ohm impedance	ATA186-I1-A
Cisco ATA 186 with complex impedance (270 ohm in series with 750 ohm and 150 NF in parallel)	ATA186-I2-A
CallManager Unit license for each ATA (1 per device required)	SW-CCM-UL-ANA
Unit license for SIP, for each ATA (1 per device required)	SW-SMH-UL-ATA-1P
Cisco CallManager Express license for each ATA (1 per device required)	SW-CCME-UL-ANA

Table 3. Cisco ATA 186 Power Supply Cables

Description	Part Number
ATA power supply cable for North America	ATACAB-NA
ATA power supply cable for Continental Europe	ATACAB-EU
ATA power supply cable for United Kingdom	ATACAB-UK
ATA power supply cable for Australia	ATACAB-AU
ATA power supply cable for Argentina	ATACAB-AR
ATA power supply cable for Japan	ATACAB-JP

SERVICES AND SUPPORT

Cisco IP Communications services and support reduce the cost, time, and complexity of implementing a converged network, and they can help you create a resilient IP communications infrastructure that will meet your business needs today-and in the future.

Cisco and its partners have designed and deployed some of today's largest IP communications networks-they understand how to integrate an IP communications solution into your network infrastructure, a solution that will help you more quickly realize business results and gain a competitive advantage.

These results are delivered through a flexible suite of collaborative offerings that help you plan, design, implement, operate, and grow an IP communications solution.

Cisco design tools and best practices ensure the solution best fits your business needs from the start, eliminating costly redesigns and downtime. Cisco proven methods ensure a sound implementation that will deliver the functions and features you expect-on time. Support services include remote network operations, network management tools to administer the converged application and network infrastructure, and technical support services.

Cisco provides the flexibility you need to employ a services strategy that meets your specific requirements.

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