



## Cisco ATA Specifications

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This section describes Cisco ATA specifications:

- [Physical Specifications, page C-1](#)
- [Electrical Specifications, page C-2](#)
- [Environmental Specifications, page C-2](#)
- [Physical Interfaces, page C-2](#)
- [Ringing Characteristics, page C-3](#)
- [Software Specifications, page C-3](#)



**Note**

The term *Cisco ATA* refers to both the Cisco ATA 186 and the Cisco ATA 188, unless otherwise stated.

## Physical Specifications

**Table C-1** *Physical Specifications*

Description	Specification
Dimensions	1.5 x 6.5 x 5.75 in. (3.8 x 16.5 x 14.6 cm) (H x W x D)
Weight	15 oz (425 g)

# Electrical Specifications

**Table C-2** *Electrical Specifications*

Description	Specification
Power	0.25 to 7.5W (idle to peak)
DC input voltage	+5.0 VDC at 1.5A maximum
Power adaptor	Universal AC/DC ~3.3 x 2.0 x 1.3 in. (~8.5 x 5.0 x 3.2 cm) ~4.8 oz (135 g) for the AC-input external power adaptor ~4 ft (1.2 m) DC cord 6 ft (1.8 m) cord UL/CUL, CE approved Class II transformer

# Environmental Specifications

**Table C-3** *Environmental Specifications*

Description	Specification
Operating temperature	41 to 104°F (5 to 40°C)
Storage temperature	-4 to 140°F (-20 to 65°C)
Relative humidity	10 to 90% noncondensing, operating, and nonoperating/storage

# Physical Interfaces

**Table C-4** *Physical Interfaces*

Description	Specification
Ethernet	Two RJ-45 connectors, IEEE 802.3 10BaseT standard
Analog telephone	Two RJ-11 FXS voice ports
Power	5 VDC power connector
Indicators	Function button with integrated status indicator Activity LED indicating network activity

# Ringing Characteristics

**Table C-5** Ringing Characteristics


Description	Specification
Tip/ring interfaces for each RJ-11 FXS port (SLIC)	
Ring voltage	40V <sub>RMS</sub> (typical, balanced ringing only)
Ring frequency	25 Hz
Ring waveform	Trapezoidal with 1.2 to 1.6 crest factor
Ring load	1400 ohm + 40μF
Ringer equivalence number (REN)	Up to 5 REN per RJ-11 FXS port
Loop impedance	Up to 200 ohms (plus 430-ohm maximum telephone DC resistance)
On-hook/off-hook characteristics	
On-hook voltage (tip/ring)	-50V
Off-hook current	27 mA (nominal)
RJ-11 FXS port terminating impedance option	The Cisco ATA186-I1 and Cisco ATA188-I1 provide 600-ohm resistive impedance. The Cisco ATA186-I2 and Cisco ATA188-I2 provide 270 ohm + 750 ohm // 150-nF complex impedance.

# Software Specifications

**Table C-6** Software Specifications (All Protocols)

Description	Specification
Call progress tones	Configurable for two sets of frequencies and single set of on/off cadence
Dual-tone multifrequency (DTMF)	DTMF tone detection and generation
Fax	G.711 fax pass-through and G.711 fax mode. Enhanced fax pass-through is supported on the Cisco ATA. Success of fax transmissions up to 14.4 kbps depends on network conditions, and fax modem/fax machine tolerance to those conditions. The network must have reasonably low network jitter, network delay, and packet-loss rate.

**Table C-6 Software Specifications (All Protocols) (continued)**

Description	Specification
Line-echo cancellation	<ul style="list-style-type: none"> <li>• Echo canceller for each port</li> <li>• 8 ms echo length</li> <li>• Nonlinear echo suppression (ERL &gt; 28 dB for frequency = 300 to 2400 Hz)</li> <li>• Convergence time = 250 ms</li> <li>• ERLE = 10 to 20 dB</li> <li>• Double-talk detection</li> </ul>
Out-of-band DTMF	<ul style="list-style-type: none"> <li>• H.245 out-of-band DTMF for H.323</li> <li>• RFC 2833 AVT tones for SIP, MGCP, SCCP</li> </ul>
Configuration	<ul style="list-style-type: none"> <li>• DHCP (RFC 2131)</li> <li>• Web configuration via built-in Web server</li> <li>• Touch-tone telephone keypad configuration with voice prompt</li> <li>• Basic boot configuration (RFC 1350 TFTP Profiling)</li> <li>• Dial plan configuration</li> <li>• Cisco Discovery Protocol</li> </ul>
Quality of Service	<ul style="list-style-type: none"> <li>• Class-of-service (CoS) bit-tagging (802.1P)</li> <li>• Type-of-service (ToS) bit-tagging</li> </ul>
Security	<ul style="list-style-type: none"> <li>• H.235 for H.323</li> <li>• RC4 encryption for TFTP configuration files</li> </ul>
Voice coder-decoders (codecs)	<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;">  <p><b>Note</b> In simultaneous dual-port operation, the second port is limited to G.711 when using G.729.</p> </div> <ul style="list-style-type: none"> <li>• G.723.1</li> <li>• G.729, G.729A, G.729AB</li> <li>• G.723.1</li> <li>• G.711A-law</li> <li>• G.711<math>\mu</math>-law</li> </ul>

**Table C-6 Software Specifications (All Protocols) (continued)**

<b>Description</b>	<b>Specification</b>
Voice features	<ul style="list-style-type: none"><li>• Voice activity detection (VAD)</li><li>• Comfort noise generation (CNG)</li><li>• Dynamic jitter buffer (adaptive)</li></ul>
Voice-over-IP (VoIP) protocols	<ul style="list-style-type: none"><li>• H.323 v2</li><li>• SIP (RFC 2543 bis)</li><li>• MGCP 1.0 (RFC 2705)</li><li>• MGCP 1.0/network-based call signalling (NCS) 1.0 profile</li><li>• MGCP 0.1</li><li>• SCCP</li></ul>

