ATA 191 Specifications

Physical Specifications

Table 1: Physical Specifications

Description	Specification
Regulatory compliance	FCC (Part 15 Class B), CE, ICES-003, A-Tick certification, Restriction of Hazardous Substances (RoHS), and UL
Power supply	DC input voltage: 5V DC at 2.0A maximum power consumption: 5W Switching type (100-240V): Automatic Power adapter: 100-240V and 50-60 Hz (26-34 VA) input with 1.8m cord
Indicator lights and LEDs	Phone 1, phone 2, network, Problem Report Tool (PRT), and power
Documentation	User Guide (online) Administration Guide (online) Regulatory Compliance and Safety Information guide (online)
Dimensions (W x H x D)	3.98 x 3.98 x 1.10 in. (101 x 101 x 28mm)
Unit weight	5.40 oz (153 g)

Electrical Specifications

Table 2: Electrical Specifications

Description	Specification
Power	0.25 to 12W (idle to peak)
DC input voltage	5.0 VDC at 2.0A maximum
Power adapter	Universal AC/DC ~4.05 x 1.93 x 1.31 in. (~10.3 x 4.9 x 3.35 cm) ~4.23 oz (120 g) for the AC-input external power adapter ~4.9 ft (1.5 m) DC cord 6 ft (1.8 m) cord UL/cUL, CE approved Class I adapter

Environmental Specifications

Table 3: Environmental Specifications

Description	Specification
Operating temperature	32 to 113°F (0 to 45°C)
Nonoperating temperature	−13 to 158°F (−25 to 70°C)
Operating humidity	10% to 90% noncondensing
Storage humidity	10% to 90% noncondensing

Physical Interfaces

Table 4: Physical Interfaces

Description	Specification
Ethernet	One RJ-45 connector, IEEE 802.3 100BaseT standard
Analog phone	Two RJ-11 FXS voice ports
Power	5 VDC power connector

Ringing Characteristics

Table 5: Ringing Characteristics

Description	Specification
Tip/ring interfaces for each RJ-11 FXS port (SLIC)	
Ring voltage	70VRMS (typical, balanced ringing only)
Ring frequency	20 Hz
Ring waveform	Trapezoidal with 1.2 to 1.6 crest factor
Ring load	1400 ohm + 40μF
Ringer equivalence number (REN)	Up to 3 REN per RJ-11 FXS port
Loop impedance	Up to 200 ohms (plus 430-ohm maximum phone DC resistance)
On-hook/off-hook characteristics	
On-hook voltage (tip/ring)	–47V
Off-hook current	24 mA (nominal)
RJ-11 FXS port terminating impedance option	The ATA 191 provides multiple impedance, such as 600 ohm for American SKU, 900 ohm for European SKU, 220 ohm (820 ohm ǁ 120nF) for Australian SKU, and so on.

Software Specifications

Table 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

Description	Specification
Fax	Fax pass-through and T.38 fax relay mode.
	V34 fax is supported for pass-through mode. Success of fax transmissions up to 33.6 kb/s 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.
	The ATA 191 only supports T38 Fax Relay Version 0 (G3).
Line-echo cancellation	• Echo canceler for each port • 8 ms echo length • Nonlinear echo suppression (ERL > 28 dB for frequency = 300 to 2400 Hz) • Convergence time = 250 ms • ERLE = 10 to 20 dB • Double-talk detection
Out-of-band DTMF	RFC 2833 AVT tones for SIP **Note** Cannot transmit RFC 2833 and in-band signaling, simultaneously.
Configuration	• DHCP (RFC 2131) • Web configuration via built-in web server • Basic boot configuration (RFC 1350 TFTP Profiling) • Dial plan configuration • Cisco Discovery Protocol
Quality of Service	• Class-of-service (CoS) bit-tagging (802.1P) • Type-of-service (ToS) bit-tagging
Security	Encryption for TFTP configuration files
Voice coder-decoders (codecs)	• G.729A, G.729AB • G.711A-law • G.711µ-law
Voice features	• Voice activity detection (VAD) • Comfort noise generation (CNG) • Dynamic jitter buffer (adaptive)

Description	Specification
Voice-over-IP (VoIP) protocols	SIP (RFC 3261)

SIP Compliance Reference Information

Information on how the ATA 191 complies with the IETF definition of SIP as described in RFC 2543 is found at the following URL:

http://www.ietf.org/rfc/rfc2543.txt