

AZ-5000-WS10

WIRELESS AP CONTROLLER



OVERVIEW

The AZ-5000-WS10 is the highly recommended AP controller among Aztech's centrally managed AP controllers specifically designed for implementation in medium to large enterprises who plan to upscale their current network in broader and wider spans. The AZ-5000-WS10 like other Access Point Controllers, allows you to easily manage all of your access points in a single location, greatly taking advantage of constant time availability, easy management, minimal staff count, and lastly, the duration of the deployment of all the access points you would be using in your network as well.

The Aztech AZ-5000-WS10 Controller is highly developed to accommodate, manage, and control up to 1024 access points and 4096 clients compared to other Access Point Controllers usually seen in the market. This feature allows this device to be the best partner in managing a wide array of access points deployed in highly populated areas such as malls, university campuses, hospitals, and other public venues in need of a reliable and consistently scalable wireless network.

The AZ-5000-WS10 also provides various features such as reliable authentication methods and data encryption, user-policies that depend on your need, bandwidth control or limiting, and even other wireless protection capabilities. Delivering superior performance and ensured flexibility, the AZ-5000-WS10 constantly ensures the consistent scalability of your network as it expands further.

Features	Additional Information	
Form Factor	Standard 19-inch rackmount	
Platform	Processor Options	1 x Intel® Xeon® E3-1225 Processor 3.10GHz(95W), 011WSC310LI01
	Chipset	Intel C206
System Memory	Technology	DDR3 1066/1333/1600MHz, unbuffered, ECC or non-ECC
	Max. Capacity	16GB
	Socket	4 x 240P DIMM
OS Support	Windows 2000, 2003, XP, 7. Linux kernel 2.4 and up, OpenBSD, FreeBSD	
BIOS	AMI BIOS 64Mbit SPI Flash ROM	
Storage	HDD Bays	2 x 2.5" or 1 x 3.5"
	CompactFlash	1 x Type II Compact Flash
Networking	Ethernet Ports	4 x GbE RJ45 default (20 GbE ports maximum)
	Bypass	2 pairs G3
	Controllers	4 x Intel 82574L or 2 x Intel I350
	Ethernet Modules	2
	Management Port	1 x Realtek 8111 RJ45 GbE port
	Security Acceleration	N/A
I/O Interface	Console	1 x RJ45
	USB	2 x USB 2.0
	IPMI via OPMA slot	N/A
	Reset Button	1 x reset button Software reset by default
Expansion	PCIe	1 x PCI-E*4 expansion
	PCI	1 x Mini-PCI
Cooling	Processor	CPU heatsink with fan duct
	System	4 x cooling fans with smart fan control
Environmental Parameters	Temperature, ambient operating / storage	0 ~ 40° C / -20~70° C
	Humidity (RH), ambient operating / ambient non-operating	5~95%, non-condensing
Miscellaneous	LCD Module	2 x 20 characters
	Watchdog	Yes
	Internal RTC with Li Battery	Yes
Physical Dimensions	Dimensions (WxHxD)	431 x 44 x 550 mm
	Weight	12 kg

SPECIFICATIONS MAY CHANGE WITHOUT PRIOR NOTICE

Power	AC: Type / Watts	1U ATX SPS / 270W or 1U ATX redundant 275W each
	AC: Input	AC 100~240V @50~60 Hz
	DC: Type / Watts	1U 250W Redundant
	DC: Input	-40V~-72VDC, 10-5A

Approvals and Compliance CE emission, FCC Class A, RoHS

Firmware Specifications

Basic Information	• Username	
	» Username	admin
	» User Authority	Administrator
	• Wireless Access Controller Information	
	» Host Name	SMB AC
	» Country/Region	China
	» Firmware Version	TBD
	» Hardware Version	TBD
	• Network Settings of TAP Interface	
	» IP Address	
	» Subnet Mask	192.168.1.228
	• Network Interface MAC Address	255.255.255.0
	» ETH0~ETH9 MAC Address	
» VIF1~8 MAC Address		

Basic Settings	• Host Name	SMB AC
	• Country/Region	China
	• Enable NTP Server	
	» Enable NTP Server	Yes
	» Time Zone Selection	GMT+8:00
	» Daylight Saving Time Adjustment	
	» Set Time	
	» Current Time	Current Time
	• Enable NTP Client	
	» Enable NTP Client	Disabled
	» Synchronize Time Interval	86400

Network Settings	» Ethernet Port Settings	One WAN port and One LAN port by default
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• TAP Port Settings	» Port VLAN ID	
	» IP Address	192.168.1.228
	» Subnet Mask	255.255.255.0
	» Primary DNS server	0.0.0.0
	» Secondary DNS server	0.0.0.0

• VLAN Settings	» VLAN Identifier	
	» VLAN ID	
	» Select Ethernet Port	
	» UNTAGGED Port	
	» TAGGED Port	
	» Total Outgoing Traffic Control (Phase II)	
	» Total Incoming Traffic Control (Phase II)	
	» User Outgoing Traffic Control (Phase II)	
	» User Incoming Traffic Control (Phase II)	
	» NAS_ID	

• QinQ Settings	» Enable QINQ	
	» GE1(WAN)QINQ Settings	
	» Enable Port QINQ	No
	» Port ETYPE	0x8100
	» Port Outer VLAN ID	
	» VLAN ID Settings Based on QINQ	
	» VLAN ID	
	» Outer ETYPE	
	» Outer VLAN ID	
	» QINQ List	

• VLAN Virtual Interface	» VLAN Virtual Interface List/Enable/Edit	
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» VLAN Virtual Interface 1	
» Basic Settings:	
» Virtual Interface	
» VLAN ID	
» Primary IP Address	0.0.0.0
» Subnet Mask	255.255.255.0
» Network Authentication Mode	
» NAT Settings:	
» Enable NAT	No
» Primary IP Address	
» Starting Public IP Address	
» Ending Public IP Address Add/Edit/NAT List/Back	
<hr/>	
• DHCP Settings	No
» Enable Option60	TAP Interface
» Interface	Enable
» HCP Status	192.168.1.228
» IP Address 1 of TAP Port	
» IP Address 2 of TAP Port	
» IP Address 3 of TAP Port	
» IP Address 4 of TAP Port	
» Starting IP Address	0.0.0.0
» Ending IP Address	0.0.0.0
» Subnet Mask	255.255.255.0
» Default Gateway	0.0.0.0
» Primary DNS Server	0.0.0.0
» Secondary DNS Server	0.0.0.0
» Primary WINS Server	0.0.0.0
» Secondary WINS Server	0.0.0.0
» Lease Time	3600
» Add/Edit/Delete	
» DHCP List	
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• Static Routing Settings	
» Destination IP Address	
» Subnet Mask	255.255.255.0
» Next Hop	
» Add/Edit/Delete	
» Static Routing List	
» ETH0~ETH9	
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• N+1 Backup Settings	
» Enable N+1	Disable
» Heartbeat Interface Settings	
» IP Address	192.168.2.228
» Subnet Mask	255.255.255.0
» N+1 Parameter Settings	
» Mode	Master
» Virtual Routing ID	
» Virtual Routing IP	
» Password	
» HB IP	
» Timeout Value for Switching among ACs	
» Virtual Routing List	
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• Link Detection Setting	
» ETH0~9	
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• TAP Configuration Template	
» TAP Template Search	
» Search	
» Filter Based on Template Name or Address	
» Filter Based on Wireless Name	Auto (802.11g and 802.11b)
» Filter Based on Channel	
» Icon for Automatically Adding TAP Template	
» Wireless Settings of TAP Template	
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» Configuration Template	
» Wireless Status	Enabled
» Region/Country	China
» Auto-Channel	
» Auto-Channel Status	Disabled
» Auto-Channel Adjustment Mode	Start
» Auto-Channel Adjustment Interval	3600s
» Minimum Signal Strength Allowed	(-70dBm)

SPECIFICATIONS MAY CHANGE WITHOUT PRIOR NOTICE

» Channel/Frequency	
» Data Rate	
» Multi-cast Rate	
» Power Adjustment	0
» RTS Threshold	2346
» Fragment Length	2346
» Beacon Interval	100
» DTIM Interval	1
» Preamble Type	Long
» Support WMM	Yes
» Enable Auto-Power Adjustment	No
» Minimum Signal for Forced Roaming	(-92dBm)
» User Control Mode	
» User Control Mode	Disable
» Maximum Throughput	30Mbps
» Maximum Retry Number when frame length is shorter than RTS Threshold	0
» Maximum Retry Number when frame length is longer than RTS Threshold	0
» Enable Console Port Capture	No
» Tunnel Address Setting	
» QoS: Enable QoS Mapping	No
» QoS Best Effort	
» 1. AIFS	0
» 2. CW Min	0
» 3. CW Max	0
» 4. TXOP Limit	0
» QoS Video	
» 1. AIFS	0
» 2. CW Min	0
» 3. CW Max	0
» 4. TXOP Limit	0

• Security Configuration Profile	
» Security Configuration Profile List	
» Enable	No
» Profile1 Settings	
» Profile Name	Profile1
» Wireless Network Name (SSID)	Wireless
» Broadcast Wireless Network Name (SSID)	Enable
» Maximum User Number	25
» VLAN ID	0
» Distributed Forwarding	Disable
» Network Authentication Mode	Open System
» Encryption Mode	
» Wireless Isolation	Disable
» Enable STA Traffic Control (Phase II)	Disable
» User Outgoing Traffic Control	100*64Kbps
» User Incoming Traffic Control	100*64Kbps
» Authentication Free	Disable
» Portal Server Binding	Please Select
» WEB Authentication Server	Please Select

• TAP ConfigurationTemplate Application	
» TAP Configuration Template	
» TAP MAC Address	00:00:00:00:00:00
» List of TAP Configuration	
» Templates Applied	

Access Control

• Trusted AP	
» Enable Trusted AP	Disable
» Trusted AP List	
» Trusted TAP List	
» Edit/Delete	
» Add Trusted AP	
» Dual Band	No
» MAC Address	
» Number	
» Project Status Information 1-3	
» Add/Apply/Cancel	
» Backup/Browse/Resume	

• WEB Authentication	
» Enable Host Name Binding	No
» Enable SSID Binding	No
» Enable ACIP Binding	No

SPECIFICATIONS MAY CHANGE WITHOUT PRIOR NOTICE

- » WEB Authentication Mode Internal portal+ External Radius
- » Accounting Interval 900
- » Idle Timeout for Reauthentication 15
- » Enable Accurate User Online Mechanism No
- » Click here to go to User Management settings

- » Information Settings for Fast Authentication Server
 - » Information Server Name
 - » Information Server Address 0.0.0.0
 - » Traffic Detection Threshold 10
 - » Time Detection threshold 300

- » Portal Server Settings
 - » Portal Server Authentication Default
 - » Portal Server Name
 - » URL http://
 - » AC Name
 - » Portal Server List
 - » Add/Edit/Delete

- PPPOE server
 - » Authentication enable/enable
 - » Authentication Location Local Authentication
 - » Max. User Number 65
 - » Local IP Address 10.0.0.1
 - » Remote Starting IP Address 10.67.15.1
 - » Remote Ending IP Address 10.67.15.64
 - » Subnet Mask 255.255.255.0
 - » Primary DNS Server 0.0.0.0
 - » Secondary DNS Server 0.0.0.0

- HTTP Redirection
 - » Enable HTTP Redirection No
 - » URL
 - » HTTP Redirection Time 7200s

- RADIUS Settings
 - » RADIUS Mode Disable
 - » Extensible Authentication Disable
 - » RADIUS Server Disable
 - » NASID NasIdentifier
 - » Apply/Cancel

- MAC Access Control
 - » Enable Access Control No
 - » Wireless STA List
 - » Add/Delete/Search STA
 - » MAC Address
 - » Select All/Add/Delete/Search
 - » Apply/Cancel/Browse/Resume

- Black-White List (Before Authentication)**
 - Access Control Disable
 - Access Control Settings
 - » Access Control Rule Based on IP Control
 - » Starting Destination IP Address
 - » Ending Destination IP Address
 - » Port
 - » VLAN ID
 - » SSID
 - » Allow List
 - » Add/Edit/Delete

- Black-White List (After Authentication)**
 - » Access Control Mode Disable
 - » Access Control Settings
 - » Access Control Rule Disable
 - » Starting Destination IP Address
 - » Ending Destination IP Address
 - » Port
 - » VLAN ID
 - » SSID
 - » Allow List
 - » Deny List
 - » Allow/Deny/Edit/Delete

• NASID Binding Settings	
» NASID Binding	VLAN
» NASID Mode	
» TAP MAC Address	
» NASID	
» TAP MAC List of NASID Binding	
» Add/Edit/Delete	
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• Bandwidth Control	Disable
» User Bandwidth Control Based on MAC	
» User Bandwidth	8*64Kbps
» MAC Address	
» Uplink Bandwidth Control	3. 0*64Kbps
» Downlink Bandwidth Control	4. 0*64Kbps
» User Bandwidth Control List	
» Add/Edit/Delete	
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• Firewall Settings	
» IP Access Control	
» ICMP Protocol	Disable
» Authorized IP Access	Disable
» Interface: VIF1~8/TAP Port	
» Ports can be accessed by all IPs:	
» TCP Port Number	
» UDP Port Number	
» IP Settings	
» IP Address	
» Denied Port Number	
» Authorized Local IP List	
» Add/Edit/Delete	
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• Firewall	
» IP Conflict Protection On/Off Disable	Disable
» IP Address Filtering Settings	
» Starting Destination IP Address	0.0.0.0
» Ending Destination IP Address	2. 0.0.0.0
» Add	
» IP Address List	
» Delete/Apply/Cancel	
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• Advanced Settings	
» WAN Broadcast Packet Separation	
» WAN Broadcast Packet Separation	Disable
» Allow ARP Packets to Pass through	Disable
» WAN Multicast Packet Separation	Disable
» WAN Unicast Packet Separation	Disable
» Wireless Separation	
» Anti DOS Attack	
» Anti DOS Flooding Attack Disable	Disable
» Anti ICMP FLOODING, ARP FLOODING and UDP FLOODING Attack	
» Anti DHCPFLOOD Attack	
» Anti DHCPFLOOD Attack	Disable
» Request Times Allowed	512
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» Broadcast Packet Filtering on Wireless Interface	Disable
» Load Balance (Phase II)	
» Load Balance Mode	Disable
» User Balance Threshold	5
» Traffic Balance Threshold	10240kbps
» Load Balance Group Name	default
» Max. Deny Times	4
» User Number Difference	1
» Data Traffic Difference	2048kbps
» IGMP Proxy	
» IGMP Proxy	Disable
» Uplink Interface	VIF1

- » VoIP Control
 - » Enable VoIP Control No
 - » Max. VoIP Number 0
- » DHCP Snooping Disable
- » DHCP Relay
 - » Enable DHCP Relay No
 - » DHCP Server IP Address 0.0.0.0
- » Link Detection
 - » Enable Link Detection No
 - » IP Address 1~2
 - » Detection Interval 20s
 - » Detection Failures Allowed 6
 - » Enable Console Port Capture No
 - » TAP Offline Timeout Setting

- Internet Access Control
 - » Internet Access Control Disable
 - » Information of Internet Access Control
 - » VLAN ID
 - » Date of Internet Access Control
 - » Start Date
 - » End Date
 - » Day(s) of Internet Access Control
 - » Day(s) of Internet Access Control
 - » Time of Internet Access Control
 - » Start Time1
 - » End Time 1
 - » Internet Access Control List
 - » Add/Edit/Delete

Management

- User Management
 - » Add Username
 - » User ID
 - » Username
 - » New Password
 - » Confirm Password
 - » MAC Address
 - » Interface
 - » Add/Apply/Cancel
 - » User List
 - » Edit/Delete

- System User Management
- User Inactivity Timeout Threshold 3
- Add User
 - » User ID
 - » Username
 - » Strong Password
 - » Minimum Password Threshold 6
 - » Password
 - » Confirm Password
 - » Lock user No
 - » Password Expires
 - » Remote Access No
 - » Maximum Number of Error Passwords Allowed 5
 - » Maximum Authentication Failure Number Allowed 6
 - » User Authority Select
 - » User List
 - » Edit/Delete

- Change Password
 - » Current Password
 - » New Password
 - » Confirm Password
 - » Restore to Default Password No
 - » Click here to go TAP
 - » password Settings

- Upgrade Firmware
 - » Browse
 - » Upload

- Backup/Retrieve Settings
 - » Backup current settings to a file
 - » Backup Retrieve settings from a backup file
 - » Restore to Factory Default Settings

- Certificate Settings
 - » Export device ID numbers to a file
 - » Import a Certificate File
 - » Certificate Information

- Valid AP Management
 - » Valid AP Settings
 - » Type
 - » Valid AP MAC Address Setting
 - » Add/Confirm/Delete/Edit/Cancel
 - » Valid AP MAC Address List
 - » Valid AP SSID List
 - » Valid AP Supplier List

- Save Configuration
 - » Save Configuration No
 - » Confirm/Cancel

- Remote Control Management
 - » SNMP
 - » Enable/Disable Enable
 - » Trap Server 1 192.168.0.254
 - » Trap Server 2 0.0.0.0
 - » Read Communication1 public
 - » Read Communication 2
 - » Write Communication 1 private
 - » Write Communication 2
 - » IP Address Snooping
 - » Telnet Disable
 - » SSH
 - » SSH Enable Enable
 - » SSH Port 22
 - » SSH Refuse Time 5

- Reboot
 - » Reboot AC No
 - » Reboot TAP No

Information

- Service Adapter List
 - » Number
 - » Reboot

- Routing List

- Port Statistic Information
 - » WLAN Interface Statistic Information
 - » WAN Interface Statistic Information

- Online TAP List
 - » TAP Search
 - » Filter based on IP Address
 - » Filter based on MAC Address
 - » Filter based on AP Name
 - » Filter based on AP Project Information
 - » Filter based on Adapter
 - » Select to deliver template to group TAPs
 - » TAP Status Statistics
 - » Deliver template to group TAPs/Scan/Refresh/Select All/Reboot/Restore to factory settings/Delete

- Wireless STA List
 - » Enquiry includes:
 - » Filter based on ID number
 - » Filter based on IP address
 - » Filter based on MAC address
 - » Filter based on AP MAC address
 - » Filter based on AP name
 - » Filter based on authentication type
 - » Status of Associated STA
 - » STA List

- List of Assigned IP
 - » Including interface, MAC address, IP address, assignment time and expiration time

- Rogue AP List
 - » Scan AP settings and rogue APs
 - » Scan AP Type
 - » Scan AP MAC
 - » Add/Edit/Delete/Confirm/Cancel
 - » Scan AP List
 - » Scan/Stop
 - » Scan rogue AP and filter rogue AP based on SSID
 - » Rogue AP list

- » Activity Log
 - » Enable Log No
 - » Log Server 1 0.0.0.0
 - » Log Server 2 0.0.0.0
 - » Port 514 514
 - » Filter based on key words
 - » Log Window
 - » Refresh/Save as/Clear

- System Information
 - » Device Serial Number
 - » Memory Storage
 - » Memory Utilization
 - » CPU Utilization
 - » System Up Time
 - » System Temperature

- Phase II Features**
- Redirect Automatically at Fixed Time
 - User-defined portal Web page
 - Automatic Channel Assignment
 - Automatic Power Adjustment
 - Rogue AP Detection
 - Statistics Feature

Product Performance Specification

Manageable AP (Number)	1024
Simultaneous Client Number	4096
DHCP Address Capability	4096 wireless users+1024 APs
MAC Address List Capability	32K
VLAN Number	4K

Environmental Specifications

Temperature, Ambient operating	0°C ~40°C
Temperature, Ambient storage	-40°C~70°C
Humidity, Ambient operating and non-operating	5~95%RH, non condensing
Watchdog	Yes
Internal RTC with Li Battery	Yes