MT-WAP100-C
Wireless Access Point Datasheet

V1.1

Contents

Overview

MT-WAP100-C series wireless access point is a new IEEE802.11n based high-performance wireless AP devices which developed by Maipu. It is designed for indoor wireless coverage with 100mW transmit power. Carrier can provide the WLAN service to the public based on this. For enterprises customer, it can be applied to provide WLAN service for the employees to inquire production data or handling work wirelessly. It is the ideal high-rate wireless AP device of the carrier hotpot coverage, enterprise WAN access and campus coverage.

MT-WAP100A-C (Single band)

MT-WAP100DP-C (Dual band)

Key Features

Easy to deploy

Maipu carrier-class wireless AP can automatically discover Maipu wireless controller and deliver the configuration via AC. And then AP zero configuration can enable the wireless network. It can integrate with the present switch, firewall, authentication server, and other network structure seamlessly without changing the present network structure.

Robust wireless coverage and performance

MT-WAP100-C can support 802.11n multiple-input, multiple-output (MIMO) dual-band wireless solution. The 802.11n wireless standard builds on previous-generation (802.11a/b/g) wireless technologies to deliver greater range and reliability, and up to nine times the performance. Where previous wireless technologies communicate over a single stream and antenna, Wireless-N MIMO solutions transmit and receive over multiple antennas to provide much greater resiliency and data throughput. With the ability to configure the access point for either the 2.4-GHz or 5-GHz frequency, you can realize greater wireless capacity and a cleaner signal, with less interference.

Support centralized management

MT-WAP100-C can serve as Fit AP to cooperate with the wireless controller for networking. At the wireless controller, control all Fit APs in the network in a unified manner and the status of all devices are clear. Compared with the traditional Fat AP, the application mode of the wireless controller + Fit AP is convenient for the network administrator to manage the whole network.

Support AP auto upgrade

MT-WAP100-C can get association with the wireless controller in the network automatically, download the latest software version to the AP device automatically, and upgrade the AP device automatically without manual interference, reducing the workload of the network maintenance. This is important for carrier large scale deployment.

Support user isolation policy

MT-WAP100-C supports the isolation between the wireless users. After enabling the function, two wireless clients cannot communicate with each other directly and the wireless client can only access the upper cable network. With the feature, the carrier can force the wireless user to the specified gateway or server for accounting or safer authentication, realizing the hot point application.

Seamless roam of whole network

MT-WAP100-C supports the L2/L3 seamless roam of single wireless controller and crossing the controller. During roam, the real-time mobile services in the sectors of medical treatment and traffic can keep un-interrupted without changing the client IP information or re-authenticating.

Convenient installation and maintenance

Cooperating with MAIPU MT-WAC series carrier-class access controller, MT-WAP100-C can realize plug-and-play and AP-zero configuration. The management, control, and configuration of the AP devices are all completed by the wireless controller, and the network management personal does not need to manage or maintain the large number of the wireless APs separately. All configurations, hardware upgrade, and security policy upgrade can be completed by the unified delivering of the wireless controller.

Specifications

HARDWARE SPECIFICATION

Model	MT-WAP100DP-C	MT-WAP100A-C
Weight	0.87 Kg	
Dimension (no antenna and attachment)	237.5x166x35 (mm)	
Network interface	10/100/1000 Mbps Ethernet port	
PoE	IEEE 802.3at/802.3af	
Power supply	48V DC	
Console port	Support	
Antenna	4 RP-SMA Male RF port (antenna is optional attachment)	2 RP-SMA Male RF port (antenna is optional attachment)
Frequency	802.11b/g/n: 2.4 GHz-2.487 GHz 802.11a/n: 5.150~5.250 GHz	802.11b/g/n: 2.4 GHz-2.487 GHz
Modulation	OFDM: BPSK@6/9 Mbps, QPSK@12/18 Mbps, 16-QAM@24 Mbps, 64-QAM@48/54 Mbps DSSS: DBPSK@1 Mbps, DQPSK@2 Mbps, CCK@5.5/11 Mbps	
	MIMO-OFDM: MCS 0-15	MIMO-OFDM: MCS 0-15
Transmit power	20 dBm （by EVM requirement）	
Receiving sensitivity	-91 dBm	
Working temperature	-25 ºC ～ 55 ºC	
Storage temperature	-50 ºC ～ 80 ºC	
Working humidity/storage humidity	5 % ~ 95 % (noncondensing)	
Overall power consumption	<12 W	
MTBF	>250000 H	

SOFTWARE SPECIFICATION

	Model	MT-WAP100DP-C	MT-WAP100A-C
	Product positioning	Indoor dual band	Indoor single band
802.11n	Streams	2	2
	Work frequency	2.4 GHz & 5 GHz	2.4 GHz
	40MHz binding	Support	
	MAX speed	600 Mbps	300 Mbps
	A-MPDU	Support	
WLAN	Virtual AP (Every frequency set 5 AP in normal application)	16	16
	Open system / shared key certification	Support	
	Broadcast Probe request control	Support	
	WPA, WPA2, Pre-RSNA user multi-access	Support	
	RTS / CTS	Support	
	CTS-to-self	Support	
	Hide SSID	Support	
WLAN expand	STA	Support STA exception offline detection, STA aging, SLA-based statistics and status inquiries	
	Access user limit	Support	
	Link integrity test	Support	
	Repeater mode	Support	
	Multi-user fair scheduling	Support	
	High-density deployment optimization application	Support	
Security policy	Encryption	Supports 64/128 bits WEP, dynamic WEP, TKIP, CCMP (11n recommended) encryption	
		Support multi-key update the trigger conditions for dynamic updates unicast / broadcast key	
	IEEE 802.11i	Support	
	Authentication	Support for IEEE 802.1x authentication, MAC address authentication, PSK authentication, Portal authentication	
	User isolate	Support: 1: Wireless users 2 layer isolation 2: SSID-based wireless user isolation	
	Forwarding security	Support packet filtering, MAC address filtering, broadcast storm suppression	
	SSID and VLAN Binding	Support	
AAA	Radius client	Support	
	Authentication server multi-domain configuration	Support	
	Backup authentication server	Support	
Network	IP address set	Support: Static IP address (FAT) or the DHCP obtain IP address (option 60)	
	Native IPv6	Support	
	IPv6 portal	Support	

	ACL	Support (IPv4/IPv6)
	Local forwarding	Support: SSID + VLAN-based local forwarding
	LLDP	Support
	Multicast	IGMP Snooping/MLD Snooping
Quality of service	IEEE 802.11e	Support WMM
	Priority	Support Ethernet port 802.1p identification and marking
		Support the mapping of wireless priority to the wired priority
	QoS policy map	Different SSID/VLAN mapping different QoS policies
	Support L2 ~ L4 packet filtering and traffic classification	Support
	User bandwidth management	Per STA allocation of available bandwidth, or all STA share the total bandwidth allocated in accordance with SSID
	Load balance	Support: base on flow, user, frequency band (support double frequency)
	WDS	Support: P2P/P2MP, WDS link PSK authentication and encryption, neighbors found that flexible
Green energy-saving	WMM power save	Support
Management	Network management	TR-069, SNMP V1/V2c/V3, Trap, HTTP(S), SSH, Telnet, FTP/TFTP
	Management SSID	Support
	Log function	SYSLOG

Order Information

Model	Description
MT-WAP100DP-C	IEEE802.11n, 100mW, dual band, indoor AP
MT-WAP100A-C	IEEE802.11n, 100mW, single band, indoor AP
31560061A	3 dBi dual band antenna, suitable for indoor AP
31560062A	5 dBi dual band antenna, suitable for indoor AP