

High Power In-Wall PoE AP

Hardware specifications

Features

Chipset solution	CPU : AR9331	RF : AR9331	
Standards	IEEE802.3u MDI / MDIX 10/100Mbps IEEE802.11b/g, IEEE802.11n		
DDR	64Mbyte DDR2		
Flash	8Mbyte SPI FLASH		
Power supply	IEEE802.3af standard POE		
CPU Frequency	400MHz		
Antenna	Internal 2dBi		
RF settings	1x1 (1Tx,1 Rx)		
RJ45 ports	2 10/100Mbps Base Ethernet Port (with Auto MDI / MDIX)		
Ethernet speed	10/100Mbps		
Reset button	Reset to factory default		
LED indicator	Power , WAN , WLAN		
Wireless speed	11b: 11M, 5.5M, 2M, 1Mbps 11g: 54M, 48M, 36M, 24M, 18M, 12M, 9M, 6Mbps 11n:6.5M, 13M, 13.5M,19.5M, 26M,27M, 39M, 40.5M,52M, 54M,58.5M, 65M,81M,108M,121.5M,135M,150Mbps		
Transmission mode	DSSS		
Modulation mode	OFDM/BPSK/QPSK/CCK/DQPSK/DBPSK		
RF frequency	2412 GHz ~ 2472GHz (channel1 ~ 13)		
Power consumption	<5W		
RF power	200mW		
	@25 (±2dB)		
Sensitivity	IEEE 802.11b 1Mbps □ -95dBm 11Mbps□ -89dBm	IEEE 802.11g 6Mbps ≤ -92dBm 54Mbps ≤ -73dBm	IEEE 802.11n HT 20 MCS 0 ≤ -86dBm MCS 7 ≤ -68dBm HT 40 MCS 0 ≤ -83dBm MCS 7 □ -65dBm



Physical specification

Item

Dimensions	86mmx86mmx48mm standard wall plug socket design
Weight	~500g

Environment requirement

Item

Operation temperature	-10~+45°C
Operation humidity (non-condensing)	10%~90% RH
Storage temperature	-40~+85°C
Storage humidity (non-condensing)	10%~90% RH
Environmental standards	RoHs compliance

TX SPECIFICATIONS

DataRate	TX Power	Tolerance	DataRate	TX Power	Tolerance
1Mbps	23dBm	±2 dB	6-24Mbps	23dBm	±2 dB
2Mbps	23dBm	±2 dB	36Mbps	23dBm	±2 dB
5.5Mbps	23dBm	±2 dB	48Mbps	23dBm	±2 dB
11Mbps	23dBm	±2 dB	54Mbps	23dBm	±2 dB

DataRate	TX Power	Tolerance	DataRate	TX Power	Tolerance
	(per chain)			(per chain)	
MCS 0/8	23dBm	±2 dB	MCS 0/8	23dBm	±2 dB
MCS 1/9	23dBm	±2 dB	MCS 1/9	23dBm	±2 dB
MCS 2/10	23dBm	±2 dB	MCS 2/10	23dBm	±2 dB
MCS 3/11	23dBm	±2 dB	MCS 3/11	23dBm	±2 dB
MCS 4/14	23dBm	±2 dB	MCS 4/14	23dBm	±2 dB
MCS 5/13	23dBm	±2 dB	MCS 5/13	23dBm	±2 dB
MCS 6/14	23dBm	±2 dB	MCS 6/14	23dBm	±2 dB
MCS 7/15	23dBm	±2 dB	MCS 7/15	23dBm	±2 dB

Model	Data Rate	EVM(db)	Model	Data Rate	Loss point
802.11b	11Mbps	<-15	802.11b	11Mbps	<5%
802.11g	54Mbps	<-25	802.11g	54Mbps	<5%

HT20 MCS7/15 <-28
 HT40 MCS 7/15 <-28

HT20 MCS 7/15 <5%
 HT40 MCS 7/15 <5%

RX SPECIFICATIONS

DataRate	Sensitivity	Tolerance	DataRate	Sensitivity	Tolerance
				(2 chains)	
1M	-96	±2dB	6M	-92dB	±2dB
2M	-93	±2dB	9M	-91dB	±2dB
5.5M	-91	±2dB	12M	-88dB	±2dB
11M	-89	±2dB	18M	-86dB	±2dB
			24M	-83dB	±2dB
802.11b			36M	-79dB	±2dB
			48M	-74dB	±2dB
			54M	-73dB	±2dB
MCS0	-86dB	±2dB	MCS0	-83dB	±2dB
MCS1	-83dB	±2dB	MCS1	-80dB	±2dB
MCS2	-81dB	±2dB	MCS2	-78dB	±2dB
MCS3	-78dB	±2dB	MCS3	-75dB	±2dB
MCS4	-74dB	±2dB	MCS4	-71dB	±2dB
MCS5	-70dB	±2dB	MCS5	-67dB	±2dB
MCS6	-69dB	±2dB	MCS6	-66dB	±2dB
MCS7	-68dB	±2dB	MCS7	-65dB	±2dB