GP-AP1800AX-FS

**1775M WiFi6 outdoor
Industrial wireless AP**
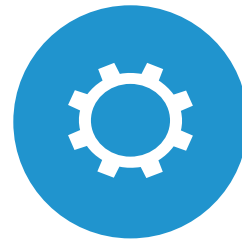
GPSENKE

CE FC RoHS

Introduction

GP-AP1800AX-FS outdoor AP product is based on IEEE802.11ax technology independently developed by GPSENKE.

It support 802.11b/g/n/ac/ax standard, Dual-frequency maximum bandwidth up to 1775Mbps. Can widely used in medical/ treatment/ schools/ underground/ parks/ pipecorridors/ scenicspots/ amusement and other outdoor wireless network coverage.

GP-AP1800AX-FS usenewest qualcomm-chip optimization algorithm. It has high anti-interference ability, high bandwidth, highstandby, strongstability, and support fat and thin integrated mode. The professional integrated outdoor design with IP67 water-proof and wide temperature working ability are very convenient for outdoor installation.
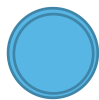
Characteristic

- 802.11 b / g / n / ac / ax standard
- Diversified access authentication
- Support 802.11k / v / r protocol
- Support 2 Gigabit LAN + 1 SFP optical slot
- IP 67 protection leve

Software specifications

Work frequency band	2.4GHz	5GHz
Channel bundling	40MHz	80MHz
MU -MIMO	Support	Support
OFDMA	Support	Support
TWT	Support	Support
1200Mbps(PHY)	NA	Support
575Mbps(PHY)	Support	NA
A-MPDU	Support	Support
MLD	Support	Support
MRC	Support	Support
STBC	Support	Support
LDPC	Support	Support
Max number of supported virtual AP's	Single RF of 16 virtual AP	
Maximum number of access users	1024 (Actual number of users varies due to application environment and other factors)	
Maximum connection rate	2.4GHz : 575Mbps 5GHz : 1200Mbps	
RTS/CTS	Support	
CTS-to-self	Support	
Hide SSID	Support	
Terminal aging, heartbeat detection	Support	

The leftmost merged column for all WLAN rows above is labeled **WLAN**.

work pattern	Bridge mode (two layers) Routing mode (three layers)	

Category	Feature	Support
RF management	load balancing	Support load balancing based on user number and user traffic
	5G preferred	Support
	Automatic channel selection	Support
	Automatic power regulation	Support
	Intelligent rate selection algorithm	Support
	Fair time scheduling	Support
Roaming	Roam switch	Supported by 802.11k, 802.11v, 802.11r
		Second floor roaming, third floor roaming
Safety	encryption mode	Support for 64 / 128-bit WEP, dynamic WEP, TKIP, and CCMP encryption
	Certification method	With AC, support WPA, WPA-PSK, WPA 2Enterprise, WPA 2-PSK, MAC address certification, Web certification, PPPoE certification and other certification methods
	Wireless user 2-layer isolation	Support
	wIDS	Support
AAA	Radius Client	Support
	Certification server multi-domain configuration	Support
	Backup the authentication server	Support
2 / 3 - layer functions	IP address setting	Static IP, DHCP dynamically obtain addresses
	IPv6	Support
	ACL	Support
	DHCP server	Support (in routing mode)
	NAT	Support (in routing mode)
Quality of service	WMM(802. 11e)	Support
	Priority mapping	Support
	QoS policy mapping	Support
	Bandwidth management	Support for SSID-based, user-based bandwidth speed limit
	Call Admission Control(CAC)	Support
Management maintenance	Fadministration of networks	SNMP V 1/V 2c /V 3 、Trap 、Telnet 、FTP /TFTP 、WEB

Hardware specifications

Size	240mm * 200mm * 80mm (excluding length of waterproof joint)	
Weight	1.2kg	
Interface	Ethernet interface	10 / 100 / 1000M Ethernet port: 1 1000M SFP optical interface: 1 console mouth: 1
Antenna	Bulid-in Antenna	2.4G: ≧ 11 dBi@ 2.4~2.4835GHz，61 degrees horizontal angle, 30 degrees vertical 5G: ≧ 11 dBi@ 5.15~5.85GHz，78 degrees horizontal angle, 30 degrees vertical
	Bulid-out Antenna	4 N-K type RF interfaces (2.4GHzx 2,5GHzx 2) built-in lightning protection
Working band	2.4G	802.11ax/n/g/b: 2.4GHz-2.483GHz (China)
	5G	802.11 ax/ac/n/a: 5.150GHz-5.350GHz 5.725GHz-5.850GHz (China)
modulation technique		OFDM : BPSK@6/9Mbps、QPSK@12/18Mbps、16-QAM@24Mbps、64-QAM@48/54Mbps DSSS : DBPSK@1Mbps、DQPSK@2Mbps、CCK@5.5/11Mbps MIMO-OFDM （11n）: MCS 0-15 MIMO-OFDM （11ac）: MCS 0-9 MIMO-OFDM （11ax）: MCS 0-11
modulation mode		11b：DSS:CCK@5.5/11Mbps,DQPSK@2Mbps,DBPSK@1Mbps 11a/g：OFDM:64QAM@48/54Mbps,16QAM@24Mbps,QPSK@12/18Mbps,BPSK@6/9Mbps 11n：MIMO-OFDM:BPSK,QPSK,16QAM,64QAM 11ac/ac wave2：MIMO-OFDM:BPSK,QPSK,16QAM,64QAM,256QAM 11ax: MIMO-OFDM: BPSK,QPSK,16QAM,64QAM,256QAM,1024QAM
Maximum transmit power	27dBm	
Emission frequency with adjustable granularity	1dBm	
Operating temperature /Storage temperature	-40ºC ~ 75ºC/-40ºC ~ 80ºC	
Working humidity / storage humidity	0%~100%(Non-condensing)	
IP protection	IP67	
Receive electricity	Support for 802.3at power supply	
Complete machine power consumption	≤ 20W	
MTBF	>250000H	