PAX1800-Lite

Dual-band Access Point
WiFi 6 (802.11ax)
IP55 rated
100% cloud managed



2.4 GHz and 5 GHz
802.11ax concurrent WiFi

Zero Config Plug-n-Play

Free cloud-based web console
for complete management

Water and dust resistant
with an IP55 rating

Universal installation kit included

DUAL-BAND WiFi 6 (802.11AX) ACCESS POINT

Plasma Cloud's WiFi 6 universal solution for almost any setup. With dual band & dual stream 802.11ax WiFi in a compact weather resistant housing the PAX1800-Lite may serve as office or hotel WiFi backbone, coffee shop hotspot and outdoor WiFi extension. It shines in medium density and high throughput demand scenarios such as schools, universities, airport and shopping malls.

POWER OVER ETHERNET (PoE)

Power over Ethernet (PoE) allows the PAX1800-Lite to be supplied with power and data over a single Ethernet cable connection. This reduces installation cost and effort for locations without available power lines. Furthermore, when connected to a Plasma Cloud PoE switch, PoE allows to centrally manage & monitor the power supply.

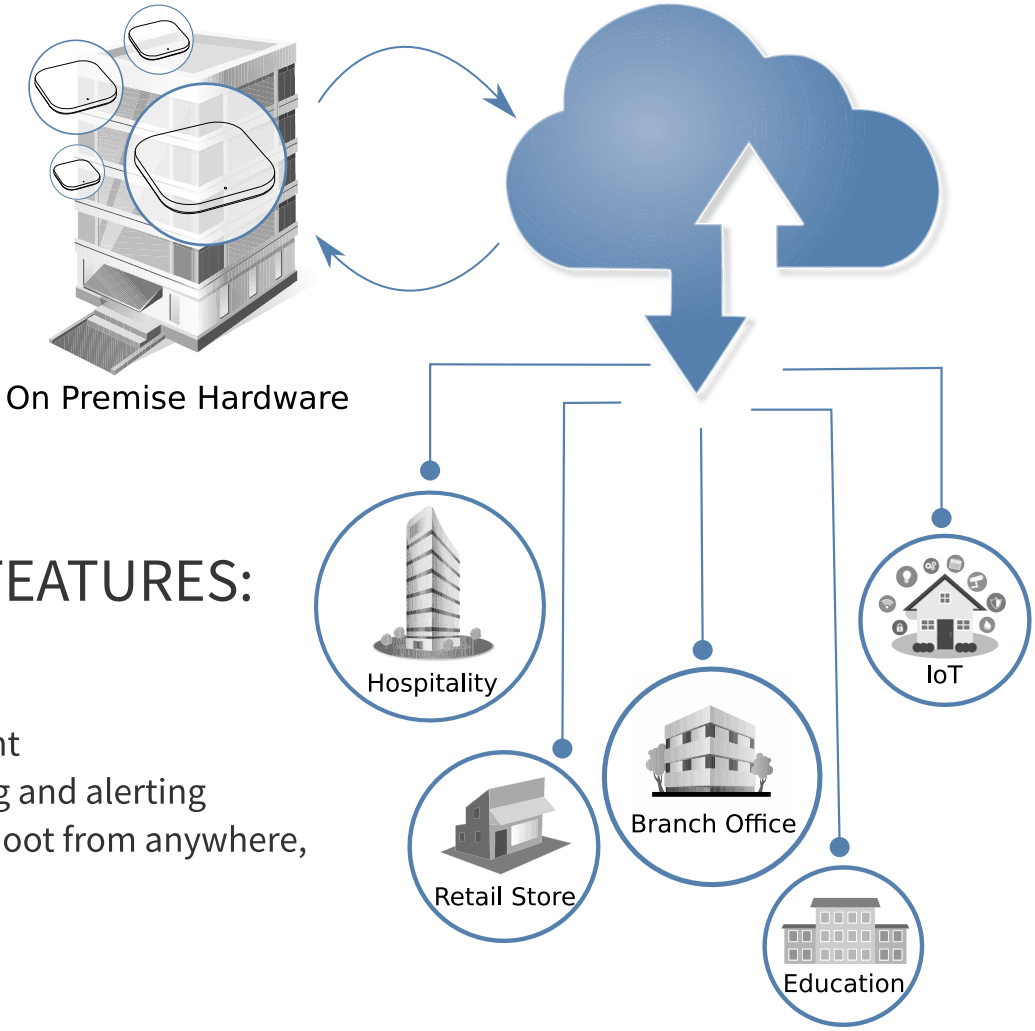
PORTS

The PAX1800-Lite features a 1G Ethernet and a USB 3.0 Type A port. The Ethernet port can be used as wired uplink, while the versatile USB port serves to connect IoT, modems or other USB devices. This multi-function port supports various wireless technologies such as Bluetooth, Zigbee, Z-Wave, LoRaWAN, LTE, and beyond—enabling integration into any smart environment.

MOUNTING OPTIONS

The universal mounting kit included with the Access Point enables flexible installation on walls, ceiling grids, poles, or outdoor structures. It offers secure and straightforward mounting solutions for virtually any environment.

DESIGNED FOR WIFI AS A SERVICE



CLOUD KEY FEATURES:

- Zero touch deployment
- Automated monitoring and alerting
- Manage and troubleshoot from anywhere, anytime

INDUSTRY LEADING SOFTWARE AND PRODUCTS

Affordable Network Solution

Plasma Cloud offers an affordable turnkey solution to cover all needs in and around your network. WiFi Access Points and Switches in various sizes to fit your needs & budget bundled with free & powerful cloud management.

Best In-Class Cloud

Plasma Cloud's technology team has built the fastest and most scalable network management cloud system. Our experts have put in their combined experience to develop a truly unique prod-uct that will impress you in many ways.

Simplicity is Key

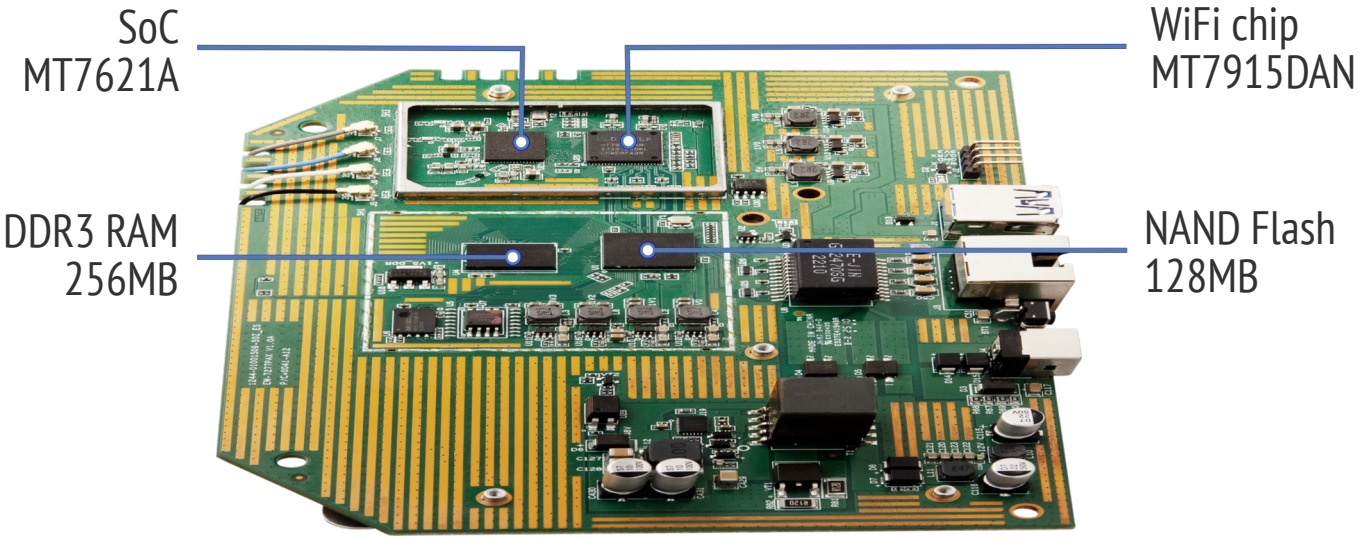
Plasma Cloud is designed for the needs of those tired of endless manual tweaking and cumbersome monitor-ing. Our smart software is designed to minimize setup effort to the essential and get you started in no time!

White-Label Dashboard

Plasma Cloud provides a rebrandable dashboard enabling businesses to harness a powerful and user-friendly cloud management platform under their own brand name.

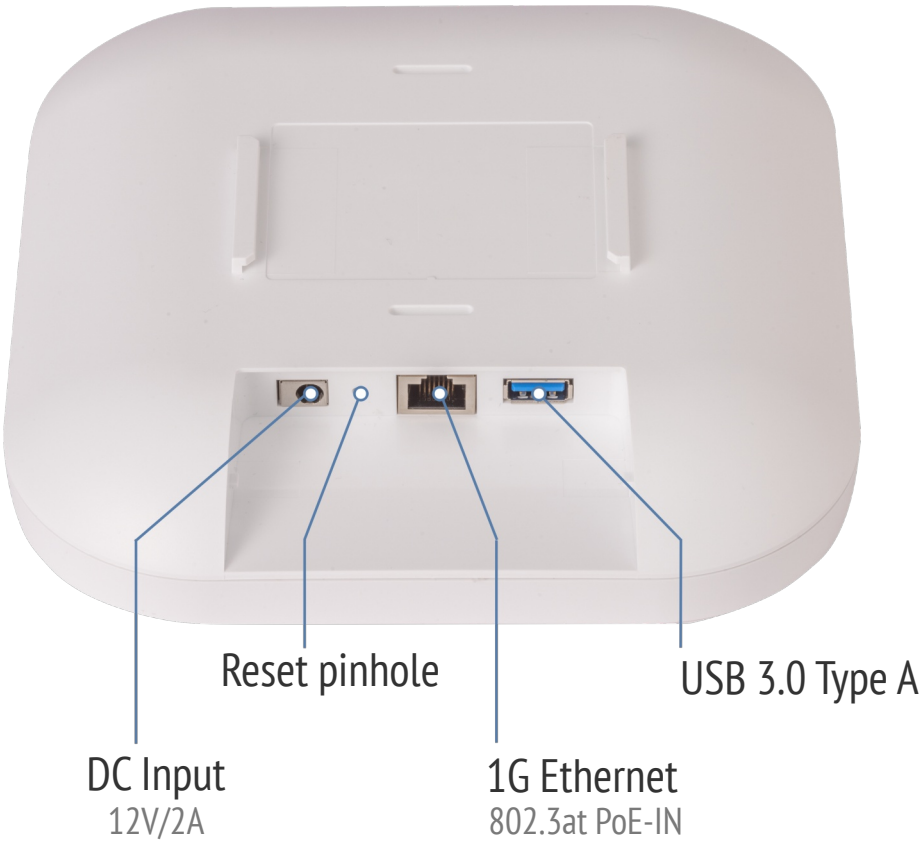
INSIDE THE PAX1800-Lite

High-performance and power-efficient design



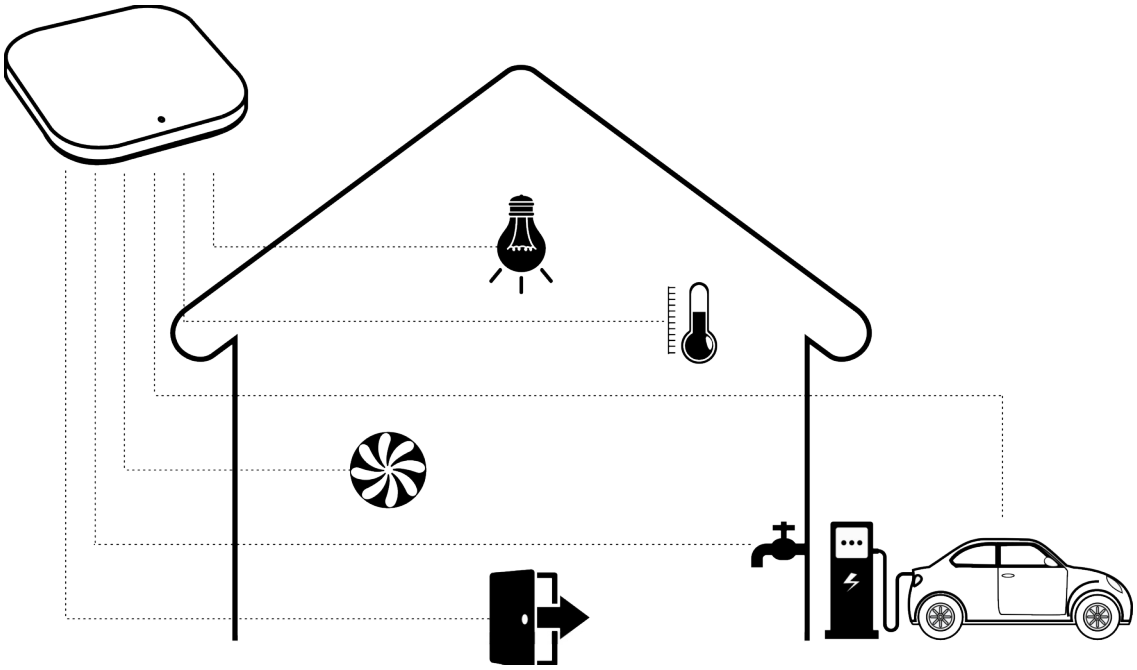
PORT BAY OVERVIEW

With flexible power options and Ethernet interfaces



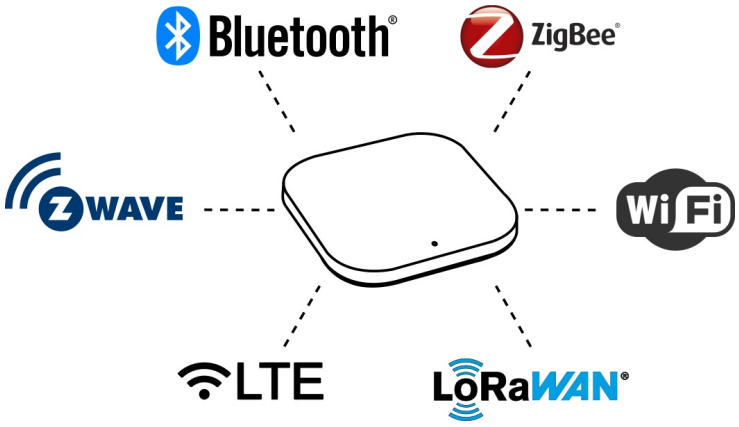
Seamless IoT Integration via USB

The PAX1800-Lite Access Point features a built-in **USB 3.0 port**, enabling peripheral expansion.



Versatile IoT Gateway

Support a wide ecosystem of wireless technologies for smart enterprise solutions:



Unlocking the Power of IoT

Connect and control a broad range of smart devices such as sensors, locks, EV chargers, lighting, climate controls and more through a unified solution.

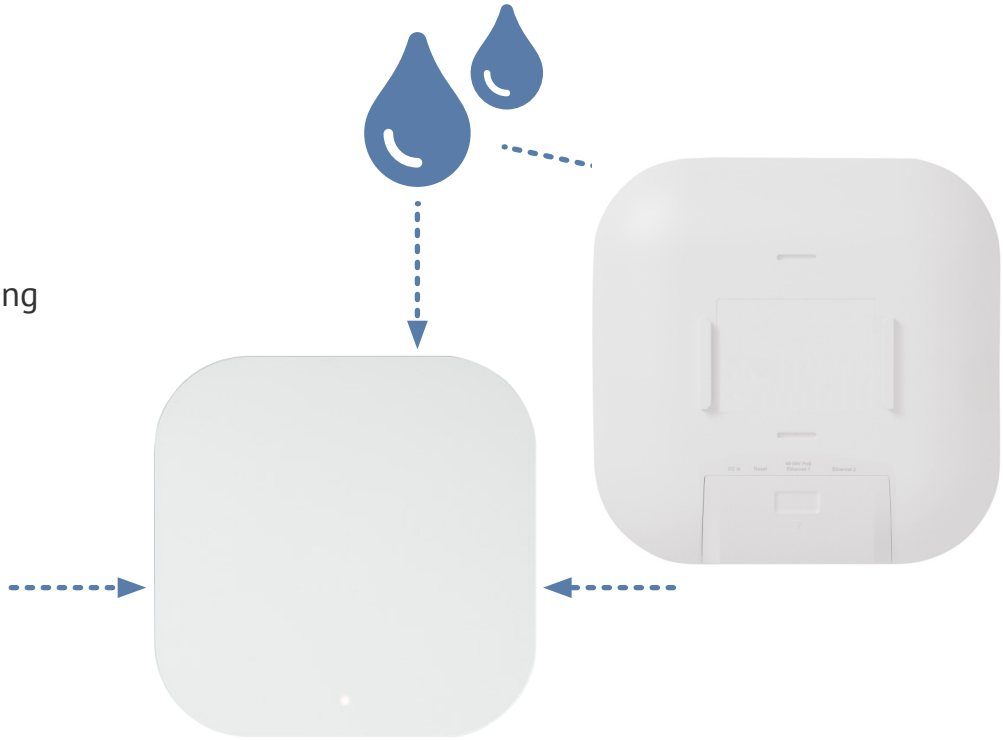
This enables real-time data collection and enhanced management for modern IoT infrastructures.

Future-Proof Your Network

As IoT standards and technologies evolve, the flexible USB port ensures long-term adaptability with next-generation peripheral modules.

HOUSING

- IP55 Rated Outdoor Housing
- Water Resistance



Operating temperature: 0 °C ~ 40 °C

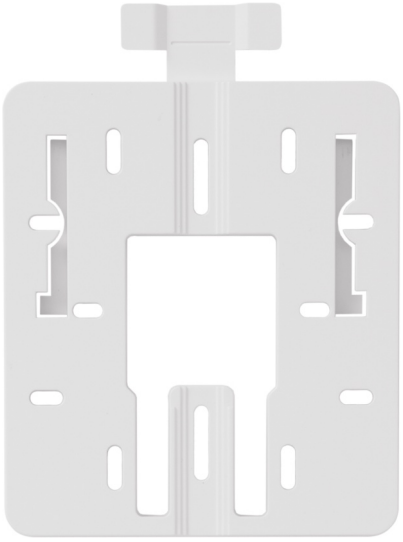
Operating humidity: 0% ~ 90% typical

Storage temperature: -30 °C ~ 80 °C

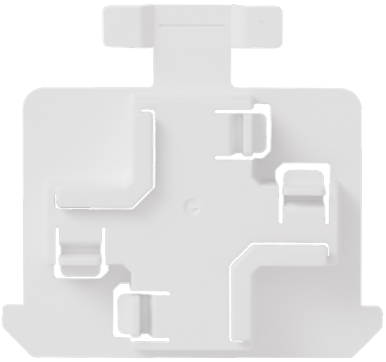
Water resistant design with sealed top and bottom enclosures and water resistant cable bay allows versatile installation environment including shaded garden, under eaves, outdoor shed, or veranda.

UNIVERSAL MOUNTING KIT

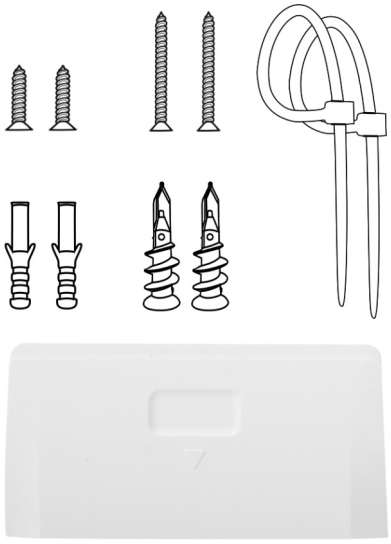
The kit includes various mounting options and is suitable for indoor and outdoor use.



Mounting Bracket



T-rail Bracket



Closing Lid

MOUNTING OPTIONS

The mounting bracket provides a secure platform to mount the PAX1800-Lite Access Point onto walls, poles, or junction boxes (US / EU / UK type). The T-rail bracket fits both 14 mm and 24 mm wide t-bars commonly found in drop ceilings.



Wall Mount



Pole Mount



Ceiling Mount



Junction Plate

TECHNICAL SPECIFICATIONS

Radio Chains / Streams	2x2 on 2.4 GHz and 2x2 on 5 GHz
Antennas	3.5 dBi on 2.4 GHz and 7.5 dBi on 5 GHz
Data Rates	573 Mbps + 1201 Mbps
2.4 GHz	2 stream, 802.11 b/g/n/ax (max rate: 574 Mbps), MU-MIMO/OFDMA
5 GHz	2 stream, 802.11 a/n/ac/ax (max rate: 1201 Mbps), MU-MIMO/OFDMA
Processor	Mediatek MT7621A
Memory	512 MB RAM DDR3 4 MB NOR Flash 128 MB NAND Flash
Hardware Watchdog	Yes
Physical Interface	1x 1.0 Gbps Ethernet port 1x USB 3.0 type-A port
PoE	802.3af/at
DC Jack	12V / 2A
Power Consumption	Min : 5W (PoE) / 3.5W (DC) Max : 19W
Max Clients	100 per AP
Indoor / Outdoor Rating	indoor / outdoor use, IP55 dust and water resistant
Dimension (W x D x H)	180 x 180 x 34 mm
Weight	~500 g
Operating Temperature	0 °C ~ 40 °C (32 °F ~ 104 °F)
Certifications	CE, FCC, IC, RCM, NZ
Zero Config Plug-n-Play	Yes
Wireless Mesh Network	Yes
Cloud Console included	Yes
Mobile App included	Yes

RF PERFORMANCE TABLE

2.4 GHz:

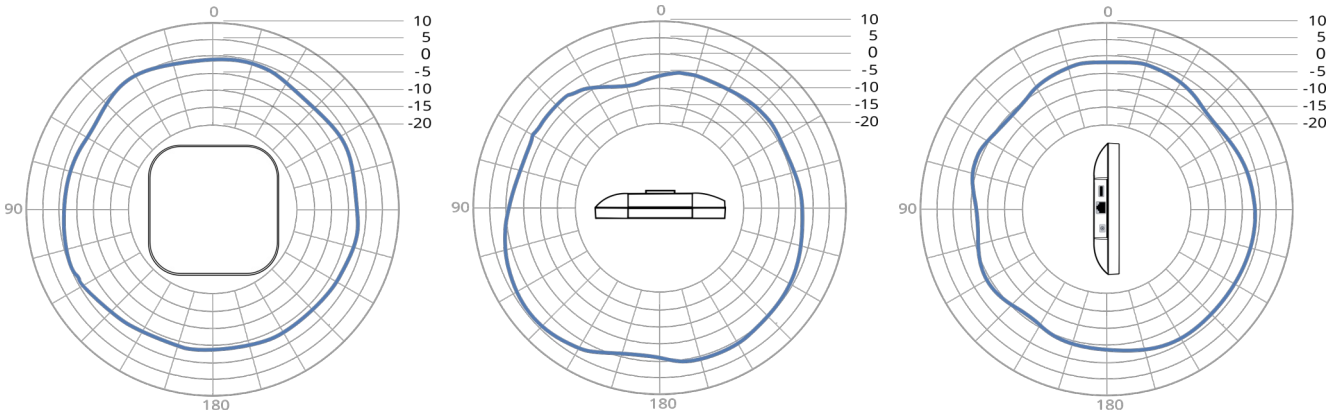
Operating Mode	Data Rate	TX Power	RX Sensitivity
802.11b	1 Mbps 11 Mbps	20 dbm 20 dbm	-94 dBm -86 dbm
802.11g	6 Mbps 54 Mbps	19 dbm 17 dbm	-91 dBm -74 dbm
802.11ax (HE20)	MCS0 MCS11	19 dbm 14 dbm	-91 dbm -62 dbm
802.11ax (HE40)	MCS0 MCS11	19 dbm 14 dbm	-88 dbm -58 dBm

5 GHz:

Operating Mode	Data Rate	TX Power	RX Sensitivity
802.11a	6 Mbps 54 Mbps	20 dbm 17 dbm	-90 dbm -73 dbm
802.11ax (HE20)	MCS0 MCS11	20 dbm 15 dbm	-89 dbm -59 dbm
802.11ax (HE40)	MCS0 MCS11	19 dbm 15 dbm	-86 dbm -56 dbm
802.11ax (HE80)	MCS0 MCS11	19 dbm 15 dbm	-83 dbm -53 dbm

RADIATION PATTERNS

2.4 GHz:



5 GHz:

