

### **PAX1800**

Dual-band Access Point WiFi 6 / 802.11ax 100% outdoor ready Cloud managed



#### PAX1800

- 2.4 GHz 802.11ax 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 / 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 may serve as office or hotel WiFi backbone, coffee shop hotspot and outdoor WiFi extension. It shines in high density and high throughput demand scenarios as well, such as in schools, universities, airport and shopping malls.

#### POWER OVER ETHERNET (PoE)

Power over Ethernet (PoE) allows to supply a device 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.

#### **ETHERNET PORTS**

The 2 provided Ethernet ports allow for maximum flexibility: one port can be used as wired uplink while the other port serves as LAN access for other wired devices. Each Ethernet port comes with a smart uplink detection to automatically determining whether a port should be uplink or provide LAN access.

#### **MOUNTING OPTIONS**

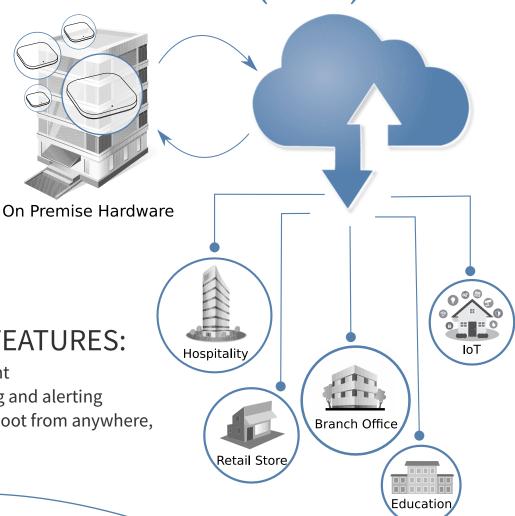
Regardless where to place the access points – on a wall, ceiling grid, pole, outdoors – the installer kit included with every AccessPoint facilitates the installation. Easily pluggable mounting options got you covered for every scenario.



#### **NETWORK AS A SERVICE (NaaS)**

#### **HIGHLIGHTS:**

- Access Control
- Presence Data
- Guest WiFi
- Advertising
- Proximity Marketing
- VPN



### 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 product 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 monitoring. Our smart software is designed to minimize setup effort to the essential and get you started in no time!



White-Label Dashboard

Our dashboard is the reference web interface. It is designed to be highly customizable, both for branding and adaptation purposes as well as for the end-user.



#### **HOUSING**

- IP55 Certified 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.

### **MOUNTING OPTIONS**











#### TECHNICAL SPECIFICATIONS

Radio Chains / Streams 2.4 GHz : 2x2

5 GHz: 2x2

**Antennas** 2.4 GHz : 5.0 dBi

5 GHz: 5.0 dBi

**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** Qualcomm Cypress IPQ6000

**Memory** 256 MB DRAM DDR3

64 MB NOR Flash

Watchdog Timer Microchip PIC10F200T-I/OT

**Physical Interface** 2x 1000 Mbps Ethernet ports

**PoE** 802.3at

DC Jack 12V / 2A

**Power Consumption** Min: 5W (PoE) / 3.5W (DC)

Max : 13W

**Indoor / Outdoor Rating**CE marked for indoor / outdoor use, IP55

**Dimension (W x D x H)** 180 x 180 x 37 mm

Weight 500 g

**Operating Temperature**  $0 \, ^{\circ}\text{C} \sim 40 \, ^{\circ}\text{C} \, (32 \, ^{\circ}\text{F} \sim 104 \, ^{\circ}\text{F})$ 

**Certifications** CE, FCC, IC, RCM

**Zero Config Plug-n-Play** Yes

Wireless Mesh Network No

Free Cloud Console Yes

Free Mobile App Yes



# RADIO 1, **2.4** GHz:

Operating Mode	Data Rate	TX Power	<b>RX Sensitivity</b>
802.11b	1 Mbps 2 Mbps 5.5 Mbps 11 Mbps	23 dBm 23 dBm 23 dBm 23 dBm	-94 dBm -88 dBm
802.11g	6 Mbps 9 Mbps 12 Mbps 18 Mbps 24 Mbps 36 Mbps 48 Mbps 54 Mbps	23 dBm 23 dBm 23 dBm 22 dBm 22 dBm 22 dBm 21 dBm 21 dBm	-91 dBm -72 dBm
802.11n (HT20)	MCS0 MCS1 MCS2 MCS3 MCS4 MCS5 MCS6 MCS7	23 dBm 23 dBm 22 dBm 22 dBm 21 dBm 21 dBm 20 dBm 20 dBm	-91 dBm -72 dBm
802.11ac (VHT20)	MCS8 MCS9	19 dBm 19 dBm	-68 dBm -66 dBm
802.11ax (HE20)	MCS10 MCS11	18 dBm 18 dBm	-63 dBm -61 dBm
802.11n (HT40)	MCS0 MCS1 MCS2 MCS3 MCS4 MCS5 MCS6 MCS7	23 dBm 23 dBm 23 dBm 22 dBm 22 dBm 21 dBm 21 dBm 20 dBm	-89 dBm -69 dBm
802.11ac (VHT40)	MCS8 MCS9	19 dBm 19 dBm	-65 dBm -63 dBm
802.11ax (HE40)	MCS10 MCS11	18 dBm 18 dBm	-60 dBm -58 dBm



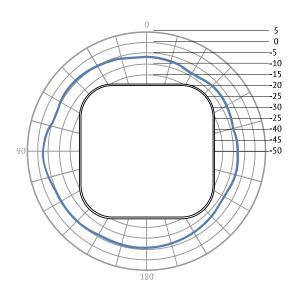
# RADIO 2, 5 GHz:

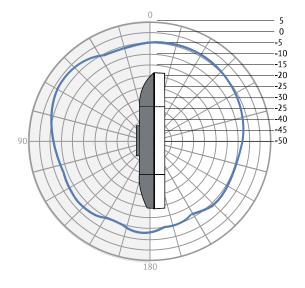
Operating Mode	Data Rate	TX Power	RX Sensitivity
802.11a	6 Mbps 9 Mbps 12 Mbps 18 Mbps 24 Mbps 36 Mbps 48 Mbps 54 Mbps	23 dBm 23 dBm 22 dBm 22 dBm 21 dBm 21 dBm 20 dBm 19 dBm	-89 dBm -70 dBm
802.11n (HT20)	MCS0 MCS1 MCS2 MCS3 MCS4 MCS5 MCS6 MCS7	23 dBm 23 dBm 22 dBm 22 dBm 21 dBm 21 dBm 20 dBm 19 dBm	-89 dBm -70 dBm
802.11ac (VHT20)	MCS8 MCS9	18 dBm 18 dBm	-67 dBm -65 dBm
802.11ax (HE20)	MCS10 MCS11	17 dBm 16 dBm	-62 dBm -60 dBm
802.11n (HT40)	MCS0 MCS1 MCS2 MCS3 MCS4 MCS5 MCS6 MCS7	23 dBm 23 dBm 22 dBm 22 dBm 21 dBm 21 dBm 20 dBm 19 dBm	-86 dBm -67 dBm
802.11ac (VHT40)	MCS8 MCS9	18 dBm 18 dBm	-64 dBm -62 dBm
802.11ax (HE40)	MCS10 MCS11	17 dBm 16 dBm	-59 dBm -57 dBm
802.11ac (VHT80)	MCS0 MCS1 MCS2 MCS3 MCS4 MCS5 MCS6 MCS7 MCS8 MCS9	23 dBm 23 dBm 22 dBm 22 dBm 21 dBm 21 dBm 20 dBm 19 dBm 18 dBm	-83 dBm -59 dBm
802.11ax (HE80)	MCS10 MCS11	17 dBm 16 dBm	-56 dBm -54 dBm



### **RADIATION PATTERNS**

# RADIO 1, **2.4** GHz:





# RADIO 2, 5 GHz:

