Technical Specifications

Access Points

1. Mechanical Specifications

Access Point Type 1

- **Dimensions:** Ø160 x 33 mm
- **Weight:** 338 g (Without mount), 413 g (With mount)
- **Enclosure Material:** Top cover: polycarbonate, Bottom cover: aluminum
- **Mounting Options:** Wall/ceiling (mounting kit included)
- **Operating Temperature Range:** -30 to 60° C (-22 to 140° F)
- **Operating Humidity:** 5% to 95% non-condensing

Access Point Type 2

- **Dimensions:** 150 x 103 x 36 mm
- **Weight:** 580 g
- **Enclosure Material:** Polycarbonate, aluminum
- **Mounting Options:** Wall (included), Table stand, flush mount (optional)
- **Operating Temperature Range:** -30 to 60° C (-22 to 140° F)
- **Operating Humidity:** 5% to 95% non-condensing

Access Point Type 3

- **Dimensions:** Ø197 x 35 mm
- **Weight:** 460 g (Without mount), 600 g (With mount)
- **Enclosure Material:** Plastic
- **Mounting Options:** Wall/ceiling (mounting kit included)
- **Operating Temperature Range:** -30 to 60° C (-22 to 140° F)

- **Operating Humidity:** 5% to 95% non-condensing

Access Point Type 4

- **Dimensions:** Ø48.5 x 159.5 mm
- **Weight:** 400 g
- **Enclosure Material:** Plastic, aluminum
- **Mounting Options:** Wall, desktop, pole mount (included), Ceiling mount (optional)
- **Operating Temperature Range:** -30 to 60° C (-22 to 140° F)
- **Operating Humidity:** 5% to 95% non-condensing

2. Hardware Specifications

Network Interface

- All Access Points must support a minimum of one GbE RJ45 port for networking.

Management Interface

- Access Points must be manageable via Ethernet.

Power Specifications

- **Power Method:** Power over Ethernet (PoE) or PoE+ supported
- **Supported Voltage Range:** 44—57V DC
- **Maximum Power Consumption:**
    - Type 1: 9W
    - Type 2: 22W
    - Type 3: 13W
    - Type 4: 11.4W

3. Wireless Specifications

Wireless Standards

- All Access Points must support the following WiFi standards:
    - 802.11a/b/g/n/ac/ax (WiFi 4, WiFi 5, WiFi 6)

    - Type 2 should additionally support WiFi 6E and WiFi 7.

Maximum TX Power

- **2.4 GHz Band:**
    - Type 1: 23 dBm
    - Type 2: 22 dBm
    - Type 3: 22 dBm
    - Type 4: 22 dBm
- **5 GHz Band:**
    - Type 1: 23 dBm
    - Type 2: 26 dBm
    - Type 3: 26 dBm
    - Type 4: 26 dBm
- **6 GHz Band (if applicable):**
    - Type 2: 23 dBm

MIMO Configuration

- **2.4 GHz Band:** Minimum 2 x 2 MIMO
- **5 GHz Band:** Minimum 2 x 2 (Type 1 & 2), 4 x 4 MIMO (Type 3 & 4)
- **6 GHz Band:** Minimum 2 x 2 MIMO (Type 2)

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- **2.4 GHz Band:** 3 dBi (Type 1 & 4), 4 dBi (Type 2 & 3)
- **5 GHz Band:** 5.4 dBi (Type 1), 5 dBi (Type 2 & 4), 6 dBi (Type 3)
- **6 GHz Band (if applicable):** 6 dBi (Type 2)

Data Rates

- Access Points must support data rates ranging from:
    - 802.11a: 6 - 54 Mbps

- 802.11b: 1 - 11 Mbps
- 802.11g: 6 - 54 Mbps
- 802.11n: 6.5 Mbps to 600 Mbps
- 802.11ac: 6.5 Mbps to 3.4 Gbps (Type 3 & 4)
- 802.11ax: 7.3 Mbps to 4.8 Gbps (Type 3 & 4)
- 802.11be: 7.3 Mbps to 5.7 Gbps (Type 2)

Wireless Security

- Supported security protocols must include WPA-PSK, WPA-Enterprise (WPA/WPA2/WPA3).

4. Software Specifications

- **VLAN Support:** 802.1Q VLAN
- **Advanced QoS:** Per-user rate limiting
- **Guest Traffic Isolation:** Supported
- **Zero wait DFS:** Supported (Type 3 & 4)
- **Concurrent Clients:** Support for 300+ clients

5. Remote Management Features

- All Access Points must support remote management through a centralized management platform.
- The management platform must allow for the following:
  - **Configuration Management:** Remotely configure and update device settings.
  - **Monitoring:** Real-time monitoring of device status, network health, and client connections.
  - **Alerts and Notifications:** Customizable alerts for connectivity issues, firmware updates, and unauthorized access attempts.
  - **User and Device Management:** View and manage connected clients and enforce network policies.

- **Reports and Analytics:** Generate detailed reports on network performance, client usage, and traffic analysis.

6. Compliance and Certifications

- All Access Points must comply with CE, FCC, and IC standards.