

AP 6120

Cost-Effective Indoor Wireless Access Point

The Ericsson Wi-Fi product portfolio supports the vision of providing seamless, high-quality user experience regardless of location or device. Within an operator's heterogeneous network strategy, the effective use of unlicensed Wi-Fi spectrum can provide a valuable complement to the carrier's licensed spectrum.

The AP 6120's concurrent dual-radio design supports both 2.4 GHz and 5 GHz operation simultaneously with 2x2 MIMO and 2 spatial streams per band. Each stream supports a peak rate of 150 Mbps, thereby providing 300 Mbps per radio and 600 Mbps per access point.

Both radios are compliant to IEEE 802.11n-2009 standards. The 2.4 GHz radio also provides full backwards compatibility for IEEE 802.11b and IEEE 802.11g clients. The 5 GHz radio provides compatibility for IEEE 802.11a clients.

Each radio supports up to 8 Subscriber Set Identifiers (SSIDs) for a total of 16 SSIDs for each AP. Similarly, MBSSID support for up to 8 virtual APs per radio is available.

The AP 6120 is a cost-effective indoor access point optimized for carrier-grade Wi-Fi coverage in the following deployment scenarios:

- Indoor venues (e.g. cafés, malls, airports, retail stores and chains)
- University / college campuses
- Train stations and transportation hubs



- Small and medium sized businesses (e.g. restaurants, realtors, lawyers)
- Multi-tenant commercial and residential properties
- Big box retail stores
- Office building lobbies and public places
- Hotels and resorts

Together with other product series within the Ericsson Wi-Fi

portfolio, the AP 6120 provides a cost-effective means of deploying managed hot zone, 3G and 4G traffic offload and operator-managed Wi-Fi services for enterprise customers, without sacrificing the performance and reliability that network operators demand.



Security Features

- WPA and WPA2 Enterprise and Personal compliant
- 802.1x (RADIUS) and EAP authentication
- WEP 64 and 128 bit encryption
- TKIP / MIC encryption
- AES encryption per IEEE 802.11i
- MAC address Access Control Lists (ACL's)
- Wireless client blacklist
- Inter-client communication control
- Denial of Service (DoS) attack prevention (including Deauthentication DoS)
- Honeypot detection
- MAC spoofing protection
- RADIUS Authentication and Accounting is supported per IETF RFC 3865 and RFC 2866

Performance Features

- Standards-Based Beamforming
- MIMO
- 40 MHz Bandwidth
- Space-Time Block Coding (STBC)
- Improved Maximal Ratio Combining (MRC)
- Maximum Likelihood Demodulation (MLD)
- Low-Density Parity Check (LDPC)
- Aggregated NAC PDU (A-MPDU)
- Wireless Multimedia (WMM and WMM-PS)

Management

Device-level fault, configuration and performance management can be performed via the CLI and GUI interfaces, while Wi-Fi Manager NMS adds network-level fault correlation and performance management support. Firmware upgrade with support for automatic rollback is supported via the management interfaces. Local and remote management interfaces can be accessed via open (Telnet / HTTP) or optionally using secure (SSH / HTTPS) protocols. The products also support SNMP v1/v2c/v3 and TR-069 management interfaces for use with any compliant management system. Standard MIBs supported include MIB-II, SNMPv2, 802.11, Ethernet-like, Interface Group. User accounts with multiple privilege levels can be supported.

TECHNICAL SPECIFICATIONS AP 6120

ELECTRICAL SPECIFICATIONS

Power requirements:

Site Power - PoE Nominal Input Voltage: 48V/0.35A (802.3af/802.3at) or

Indoor AC/DC Power adapter: Input: 100~240VAC, Output: 48V/0.5A

Backhaul Requirements:

All products support integrated wireless point-to-point, point-to-multipoint or mesh backhaul. Gigabit Ethernet WAN wired backhaul also supported.

Transmission:

1 10/100/1000Base-TX (Cat.5 RJ-45) WAN port

4 10/100/1000Base-TX (Cat.5 RJ-45) LAN port

1 USB 2.0 port for future expansion

IEEE 802.1D Bridging, IEEE 802.1Q VLANs, IEEE 802.1w RSTP and IEEE 802.1p QoS

Wide range of L2 and L3 VPN protocols to support mobility

Support for GTP and PMIP for mobile core integration

Access point capacity per radio:

2x2 MIMO with 2 spatial streams (300 Mbps per radio)

MECHANICAL SPECIFICATIONS

Mechanical Dimensions: (L x W x H): 17 x 17 x 4 cm

Weight: 360 g

ENVIRONMENTAL SPECIFICATIONS

Temperature range:

Operating: 0° to +50 °C

Storage: -40° to +80 °C

Mounting requirements:

Wall, ceiling, counter

TRANSMIT POWER*

| Mode | Spatial Streams | | | |
|-----------------|-----------------|-----|-------|-----|
| | 1 | | 2 | |
| | Rate | dBm | Rate | dBm |
| 802.11b | 1 Mbps | 23 | | |
| | 11 Mbps | 23 | | |
| 802.11g | 6 Mbps | 22 | | |
| | 54 Mbps | 22 | | |
| 802.11n HT20 | MCS0 | 23 | MCS8 | 23 |
| | MCS7 | 23 | MCS15 | 23 |
| 802.11n HT40 | MCS0 | 22 | MCS8 | 22 |
| | MCS7 | 22 | MCS15 | 22 |

Target Tx Power per Chain 2.4 GHz

| Mode | Spatial Streams | | | |
|-----------------|-----------------|-----|-------|-----|
| | 1 | | 2 | |
| | Rate | dBm | Rate | dBm |
| 802.11b | 1 Mbps | 32 | | |
| | 11 Mbps | 32 | | |
| 802.11g | 6 Mbps | 31 | | |
| | 54 Mbps | 31 | | |
| 802.11n HT20 | MCS0 | 32 | MCS8 | 32 |
| | MCS7 | 32 | MCS15 | 32 |
| 802.11n HT40 | MCS0 | 31 | MCS8 | 31 |
| | MCS7 | 31 | MCS15 | 31 |

Effective Isotropic Radiated Power (EIRP) 2.4GHz

| Mode | 5.150 - 5.250 GHz | | | | 5.725 - 5.850 GHz | | | |
|-----------------|-------------------|-----|-------|-----|-------------------|-----|-------|-----|
| | Spatial Streams | | | | Spatial Streams | | | |
| | 1 | | 2 | | 1 | | 2 | |
| | Rate | dBm | Rate | dBm | Rate | dBm | Rate | dBm |
| 802.11a | 6 Mbps | 12 | | | 6 Mbps | 13 | | |
| | 54 Mbps | 12 | | | 54 Mbps | 13 | | |
| 802.11n HT20 | MCS0 | 12 | MCS8 | 12 | MCS0 | 13 | MCS8 | 13 |
| | MCS7 | 12 | MCS15 | 12 | MCS7 | 13 | MCS15 | 13 |
| 802.11n HT40 | MCS0 | 12 | MCS8 | 12 | MCS0 | 13 | MCS8 | 13 |
| | MCS7 | 12 | MCS15 | 12 | MCS7 | 13 | MCS15 | 13 |

Target Tx Power per Chain 5 GHz

| Mode | 5.150 - 5.250 GHz | | | | 5.725 - 5.850 GHz | | | |
|-----------------|-------------------|-----|-------|-----|-------------------|-----|-------|-----|
| | Spatial Streams | | | | Spatial Streams | | | |
| | 1 | | 2 | | 1 | | 2 | |
| | Rate | dBm | Rate | dBm | Rate | dBm | Rate | dBm |
| 802.11a | 6 Mbps | 23 | | | 6 Mbps | 24 | | |
| | 54 Mbps | 23 | | | 54 Mbps | 24 | | |
| 802.11n HT20 | MCS0 | 23 | MCS8 | 23 | MCS0 | 24 | MCS8 | 24 |
| | MCS7 | 23 | MCS15 | 23 | MCS7 | 24 | MCS15 | 24 |
| 802.11n HT40 | MCS0 | 23 | MCS8 | 23 | MCS0 | 24 | MCS8 | 24 |
| | MCS7 | 23 | MCS15 | 23 | MCS7 | 25 | MCS15 | 24 |

EIRP 5 GHz

* Maximum supported transmit power may be limited by local regulations in the country of operation

RECEIVE SENSITIVITY

| Mode | Spatial Streams | | | |
|-----------------|-----------------|---------|-------|---------|
| | 1 | | 2 | |
| | Rate | Rx Sens | Rate | Rx Sens |
| 802.11b | 1 Mbps | -95 | | |
| | 11 Mbps | -91 | | |
| 802.11g | 6 Mbps | -93 | | |
| | 54 Mbps | -78 | | |
| 802.11n HT20 | MCS0 | -93 | MCS8 | -92 |
| | MCS7 | -75 | MCS15 | -73 |
| 802.11n HT40 | MCS0 | -90 | MCS8 | -92 |
| | MCS7 | -73 | MCS15 | -69 |

AP 6120 Rx Sensitivity 2.4 GHz

| Mode | Spatial Streams | | | |
|-----------------|-----------------|---------|-------|---------|
| | 1 | | 2 | |
| | Rate | Rx Sens | Rate | Rx Sens |
| 802.11a | 6 Mbps | -92 | | |
| | 54 Mbps | -77 | | |
| 802.11n HT20 | MCS0 | -92 | MCS8 | -91 |
| | MCS7 | -74 | MCS15 | -72 |
| 802.11n HT40 | MCS0 | -89 | MCS8 | -87 |
| | MCS7 | -71 | MCS15 | -68 |

AP 6120 Rx Sensitivity 5 GHz