



EKSELANS BY ITS

WIFI ACCESS POINTS SYSTEM



ENTER THE EK WORLD



**Discover our
new professional
system
of wireless access
points, switches
PoE and
controllers for
WiFi installations**





INDOOR ACCESS POINTS

Pag. 4

OUTDOOR CPE'S / AP'S

Pag. 8



PoE SWITCHES

Pag. 10



CONTROLLERS

Pag. 12



POE INJECTORS

Pag. 13



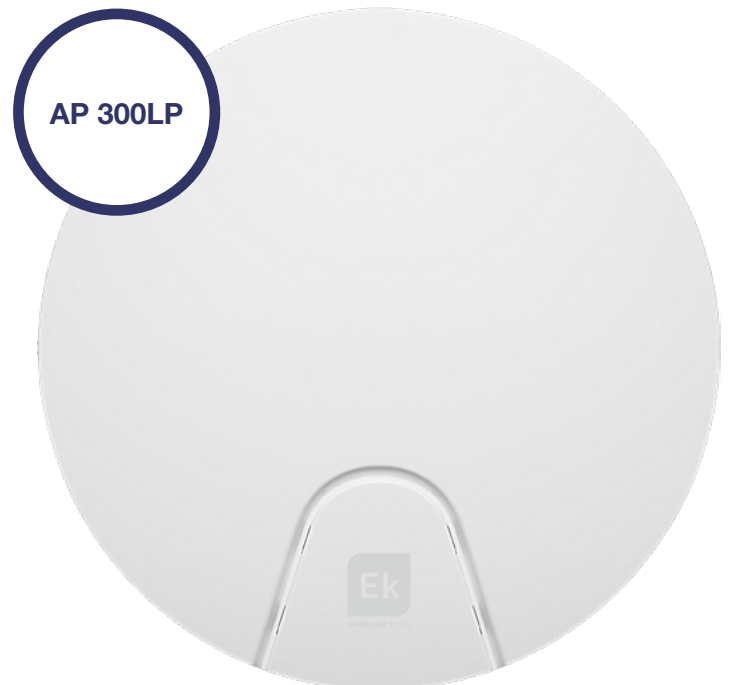
INDOOR ACCESS POINTS

AP 300 LP

- 300 Mbps / 2,4 Ghz
- Supports high user density
- Compact design
- Multiple SSID
- Large coverage. Range 140-160m (*)
- 1 Ethernet ports
- Power PoE 24Vdc or 12Vdc source
- Injector PoE included

| REFERENCE | AP 300 LP |
|---------------------|--|
| Code | 330004 |
| Hardware | |
| Antenna | 2 x Omni 5dbi |
| RF | 2T2R, 300 Mbps MIMO |
| Transmission power | Max. 20 - 23 dBm (IEEE802.11 b/g/n) - 2.4Ghz <i>(EK recommends setting the maximum transmitting power according to the current legislation of each country)</i> |
| Reset button | Reset and factory settings |
| Software | |
| Programming | Network management WEB, TELNET |
| Options | VLAN, QoS, bandwidth control, limitation "broadcast storm",... |
| Connections | |
| Ethernet Interface | 1 x 10/100 Mbps Ethernet (connectors RJ45) ports |
| Power Supply | PoE: 24V IEEE 802.3af ; DC 12V/1A Connector |
| Wireless | |
| Operating mode | AP, Gateway, Repeater |
| Throughput | IEEE802.11b: 11Mbps IEEE802.11g: 54Mbps IEEE802.11n: 300Mbps |
| Frequency | 2.4GHz-2.4835 GHz |
| Channel | 13. Configurable for various standards |
| Modulation mode | DSSS and OFDM |
| Coding | BPSK, QPSK, 16QAM and 64QAM |
| Encryption | 802.11i Security: WEP-64/128, TKIP(WPA-PSK) and AES(WPA2-PSK) |
| General | |
| Working temperature | 0°C - 55°C |
| Power consumption | Max 12,5 W |
| Dimensions | Ø 15.7 x 3.6 cm |

(*) The maximum distance will depend on the conditions of use of the AP



INDOOR ACCESS POINTS

Ek



AP 750 NG

- Dual performance 2.4GHz and 5GHz
- Compatible 802.11ac
- High speed WiFi (300 + 450 Mbps)
- Modes of operation: router, AP and repeater
- Optimal for residential or SME market
- 2x 10/100 Mbps ethernet ports
- VLAN support for traffic segmentation
- Power PoE 802.3at (48V) or 12 Vdc



| | |
|--------------------------|---|
| REFERENCE | AP 750 NG |
| Code | 330011 |
| Hardware | |
| Antenna (Tx Rx, SS) | 2'4 GHz: 2x2:2 5GHz: 1x1:1 |
| Transmission power | 2'4GHz: 802.11bgn, 20-27 dBmW 5GHz: 802.11n/ac, 17-24 dBmW <i>(EK recommends setting the maximum transmitting power according to the current legislation of each country)</i> |
| Reset button | Reset and factory settings |
| Software and programming | |
| Operating modes | AP, router, Repetidor, link WISP |
| Configuration | Web, Telnet, Controladora |
| Options | Segmentación VLAN-SSID, WLan partition, Preferred 5G, log de actividad, FIT AP, modulación de potencia y sensibilidad, seguridad IP (filtros URL, IP, etc.), DDNS |
| Interfaces | |
| Ethernet | 2x 10/100 Mbps |
| Modulation Speed | 802.11bgn: 11, 54, 300 Mbps 802.11ac: 450 Mbps |
| Bandwidth | 802.11bgn: 20, 40 MHz 802.11ac: 20, 40, 80 MHz |
| Canalization | 2'4 GHz: 1..13 5 GHz: U-NII 36..48 U-NII 2A 52..68 U-NII 2C 96..140 U-NII 3 149..165 (Bands of selectable channels according to regulation) |
| Modulation | DSSS: DBPSK, DQPSK, CCK OFDM: BPSK, QPSK, 16QAM..256QAM |
| Encryption | WPA2-Personal (TKIP/AES128) |
| General | |
| Power supply | PoE 802.3at (48V) 12 Vdc / 2A |
| Working temperature | 0°C – 55°C |
| Power consumption | máx. 30 W (PoE) |
| Dimensions | 188 x 188 x 50 mm |



| | |
|--------------------------|--|
| REFERENCE | AP 1200 W2 |
| Code | 330012 |
| Hardware | |
| Antenna (Tx Rx, SS) | 2'4 GHz: 2x2:2 5GHz: 2x2:2 |
| Transmission power | 2'4GHz: 802.11bgn, 20-30 dBmW 5GHz: 802.11an/ac, 18-28 dBmW <i>(EK recommends setting the maximum transmitting power according to the current legislation of each country)</i> |
| Reset button | Reset and factory settings |
| Software and programming | |
| Operating modes | AP, router, Repetidor, link WISP |
| Configuration | Web, Telnet, Controladora |
| Options | Segmentation VLAN-SSID, WLAN partition, Preferred 5G, log de actividad, FIT AP, Power modulation and sensitivity, IP security (filters URL, IP, etc.), DDNS |
| Interfaces | |
| Ethernet | 2x 10/100/1000 Mbps |
| Modulation Speed | 802.11bgn: 11, 54, 300 Mbps 802.11ac: 900 Mbps |
| Bandwidth | 802.11bgn: 20, 40 MHz 802.11ac: 20, 40, 80 MHz |
| Canalization | 2'4 GHz: 1..13 5 GHz: U-NII 36..48 U-NII 2A 52..68 U-NII 2C 96..140 U-NII 3 149..165 (Bands of selectable channels according to regulation) |
| Modulation | DSSS: DBPSK, DQPSK, CCK OFDM: BPSK, QPSK, 16QAM..256QAM |
| Encryption | WPA2-Personal (TKIP/AES128) |
| General | |
| Power supply | PoE 802.3at (48V) 12 Vdc / 2A |
| Working temperature | 0°C – 55°C |
| Power consumption | max. 30 W (PoE) |
| Dimensions | 188 x 188 x 50 mm |

INDOOR ACCESS POINTS

AP 1200 W2

- Wireless Access Point AC
- High-speed 802.11AC 1200 Mbps
- 2.4 Ghz and 5 GHz frequency bands
- Supports high user density
- Compact design
- Multiple SSID
- Large coverage. Range 130-150m (*)
- 2 Ethernet ports
- PoE power 48Vdc or 12Vdc source



OUTDOOR CPE / AP POINT TO POINT

Ek



CPE 300 24LP

- 300 Mbps / 2.4 Ghz
- Supports high user density
- Multiple SSID
- Long-range 1km (*)
- AP Mode / Router / Repeater / WISP
- PoE 24Vdc power supply



| REFERENCE | CPE 300-24LP |
|-----------------------|---|
| Code | 333010 |
| Hardware | |
| Antenna | 1 x 8 dBi |
| Transmission power | Max. 20 dBm (IEEE802.11 b/g/n) - 2.4Ghz <i>(EK recommends setting the maximum transmitting power according to the current legislation of each country)</i> |
| Half-power beam width | H: 60° V: 5° |
| Reset button | Reset and factory settings |
| Software | |
| Programming | Network management WEB, TELNET |
| Options | VLAN, QoS, bandwidth control, limitation "broadcast storm".... |
| Connections | |
| Ethernet Interface | 2 x 10 /100 Mbps Ethernet ports |
| Power Supply | PoE: 24V, 12Vdc/1A Connector |
| Wireless | |
| Operating mode | AP, Gateway, Repeater, WISP |
| Throughput 2.4 GHz | IEEE802.11B: 11MBPS IEEE802.11G: 54MBPS IEEE802.11N: 300MBPS |
| Frequency | 2.4 GHz |
| Channel | 1 - 13 2.4 GHz |
| Modulation mode | OFDM, DSSS |
| Coding | BPSK, QPSK, 16QAM and 64QAM / DBPSK, DQPSK, CCK |
| Encryption | 802.11i Security: WEP-64/128, TKIP(WPA-PSK) and AES(WPA2-PSK) |
| General | |
| Working temperature | -40°C - 55°C |
| Power consumption | Max. 20 W |
| Dimensions | 16 x 9 x 6 cm |

(*) The maximum distance will depend on the conditions of use of the AP



OUTDOOR CPE / AP

POINT TO POINT

CPE 300

- 300 Mbps / 5.8 GHz
- Supports high density of users
- Multiple SSID
- Long-range 4km (*)
- 2 LAN ports
- AP Mode / Router / Repeater / WISP
- Power PoE 24Vdc or 12Vdc external power supply
- PoE injector included

| REFERENCE | CPE 300 |
|-----------------------|---|
| Code | 333001 |
| Hardware | |
| Antenna | 1 x 15dbi |
| Transmission power | Max. 25 dBm (IEEE802.11 n) - 5.8GHz <i>(EK recommends setting the maximum transmitting power according to the current legislation of each country)</i> |
| Half-power beam width | H: 70° V: 15° |
| Reset button | Reset and factory settings |
| Software | |
| Programming | Network management WEB, TEL-NET |
| Options | VLAN, QoS, bandwidth control, limitation "broadcast storm",... |
| Connections | |
| Ethernet Interface | 2 x 10 /100 Mbps Ethernet (connectors RJ45) ports |
| Power Supply | PoE: 24V, 12Vdc/1A Connector |
| Wireless | |
| Operating mode | AP, Gateway, Repeater, WISP |
| Throughput | IEEE802.11b: 11Mbps IEEE802.11g: 54Mbps IEEE802.11n: 300Mbps |
| Frequency | 5.180 GHz–5.825 GHz |
| Channel | 36 - 165 |
| Modulation mode | OFDM |
| Coding | BPSK, QPSK, 16QAM and 64QAM |
| Encryption | 802.11i Security: WEP-64/128, TKIP(WPA-PSK) and AES(WPA2-PSK) |
| General | |
| Working temperature | 0°C - 55°C |
| Power consumption | Max. 15 W |
| Dimensions | 25 x 9 x 3,2 cm |

(*) The maximum distance will depend on the conditions of use of the AP



CPE 300

OMNIDIRECTIONAL OUTDOOR CPE / AP

Ek



CPE 1200-OLP

- High-speed 802.11AC 900 Mbps
- 2.4 Ghz and 5.8 GHz frequency bands
- Supports high density of users
- Multiple SSID
- Long-range 400m (*)
- AP Mode / Router / Repeater / WISP
- PoE 48Vdc power supply



| REFERENCE | CPE 1200-OLP |
|---------------------|--|
| Code | 333009 |
| Hardware | |
| Antenna | 4 x Omni 5 dBi |
| Transmission power | Max. 24 - 27 dBm (IEEE802.11 b/g/n) - 2.4Ghz Max. 21 -24 dBm (IEEE802.11 n/ac) - 5.8Ghz <i>(EK recommends setting the maximum transmitting power according to the current legislation of each country)</i> |
| Reset button | Reset and factory settings |
| Software | |
| Programming | Network management WEB, TEL-NET |
| Options | VLAN, QoS, bandwidth control, limitation "broadcast storm",... |
| Connections | |
| Ethernet Interface | 2 x 10 /100 / 1000 Mbps Ethernet ports |
| Power Supply | PoE: 48V, 12Vdc/1A Connector |
| Wireless | |
| Operating mode | AP, Gateway, Repeater, WISP |
| Throughput 2.4 GHz | IEEE802.11B: 11MBPS IEEE802.11G: 54MBPS IEEE802.11N: 300MBPS |
| Throughput 5.8 GHz | IEEE802.11 ac: 900Mbps |
| Frequency | 2.4 GHz 5.180 GHz-5.825 GHz |
| Channel | 1 - 13 for 2.4 GHz 36 - 165 for 5.8 GHz |
| Modulation mode | OFDM, DSSS |
| Coding | BPSK, QPSK, 16QAM and 64QAM / DBPSK, DQPSK, CCK |
| Encryption | 802.11i Security: WEP-64/128, TKIP(WPA-PSK) and AES(WPA2-PSK) |
| General | |
| Working temperature | -40°C - 70°C |
| Power consumption | Max. 10 W |
| Dimensions | 31,5 x 14,5 x 8 cm |

(*) The maximum distance will depend on the conditions of use of the AP



OMNIDIRECTIONAL OUTDOOR CPE / AP

CPE 1200-O

- High-speed 802.11AC 1200 Mbps
- 2.4 GHz and 5.8 GHz frequency bands
- Omnidirectional coverage with antennas ANT24-12 and ANT58-12
- Supports high density of users
- Multiple SSID
- Long-range 400m (*)
- AP Mode / Router / Repeater / WISP
- PoE 48Vdc power supply

| REFERENCE | CPE 1200-O |
|---------------------|--|
| Code | 333002 |
| Hardware | |
| Antenna | 6 PCS SMA Connector |
| Transmission power | Max. 26 - 29 dBm (IEEE802.11 b/g/n) - 2.4GHz Max. 20 -23 dBm (IEEE802.11 n/ac) - 5.8GHz <i>(EK recommends setting the maximum transmitting power according to the current legislation of each country)</i> |
| Reset button | Reset and factory settings |
| Software | |
| Programming | Network management WEB, TEL-NET |
| Options | VLAN, QoS, bandwidth control, limitation "broadcast storm",... |
| Connections | |
| Ethernet Interface | 1 x 10 / 100 / 1000 Mbps Ethernet ports |
| Power Supply | PoE: 48V, 12Vdc/1A Connector |
| Wireless | |
| Operating mode | AP, Gateway, Repeater, WISP |
| Throughput 2.4 GHz | IEEE802.11B: 11MBPS IEEE802.11G: 54MBPS IEEE802.11N: 300MBPS |
| Throughput 5.8 GHz | IEEE802.11ac: 1200Mbps |
| Frequency | 2.4 GHz 5.180 GHz-5.825 GHz |
| Channel | 1 - 13 for 2.4 GHz 36 - 165 for 5.8 GHz |
| Modulation mode | OFDM, DSSS |
| Coding | BPSK, QPSK, 16QAM and 64QAM / DBPSK, DQPSK, CCK |
| Encryption | 802.11i Security: WEP-64/128, TKIP(WPA-PSK) and AES(WPA2-PSK) |
| General | |
| Working temperature | 0°C - 55°C |
| Power consumption | Max. 20 W |
| Dimensions | 21,5 x 27,6 x 8 cm |

(*) The maximum distance will depend on the conditions of use of the AP



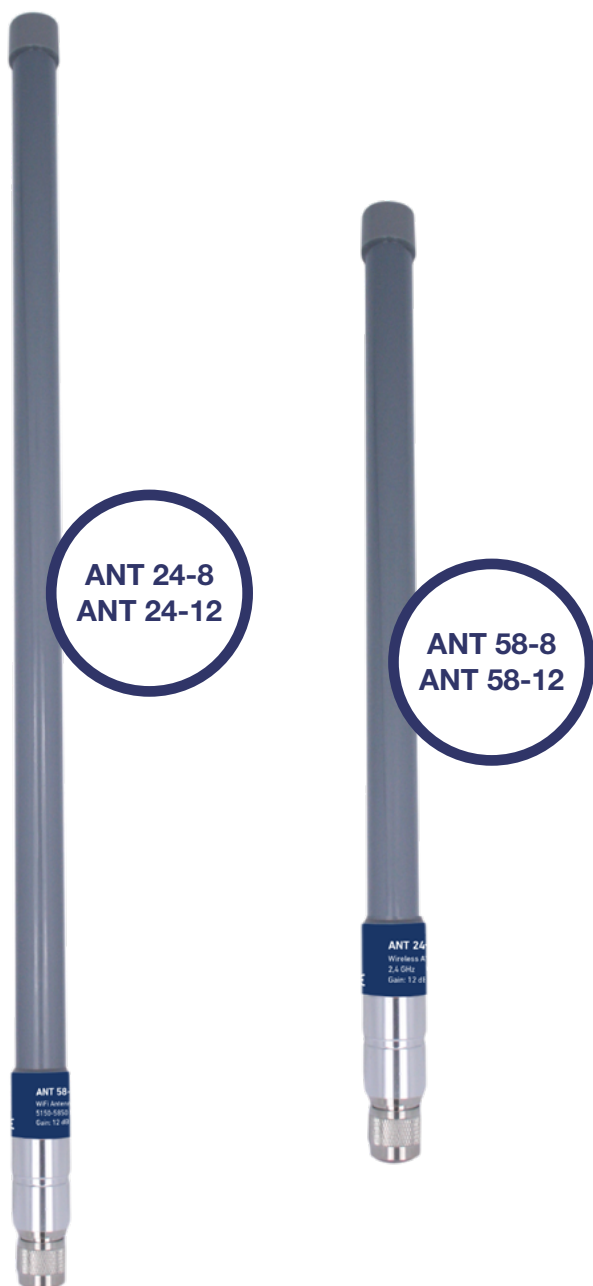
OMNIDIRECTIONAL OUTDOOR CPE / AP

Ek



ANT 24-8 / 58-8 / 24-12 / 58-12

- Wireless antennas
- ANT 24-12 2.4 GHz
- ANT 58-12 5 GHz



| REFERENCE | | ANT 24-8 | ANT 58-8 |
|-----------------------|------|-------------|-------------|
| Code | | 333008 | 333007 |
| Frequency | GHz | 2.4 | 5 |
| Gain | dBi | 8 | 8 |
| Half-power beam width | ° | H:360 / V:6 | H:360 / V:6 |
| Connector | type | N Female | N Female |
| Size | mm | 550x24 | 360x20 |

| REFERENCE | | ANT 24-12 | ANT 58-12 |
|-----------------------|------|-------------|-------------|
| Code | | 333004 | 333003 |
| Frequency | GHz | 2.4 | 5 |
| Gain | dBi | 12 | 12 |
| Half-power beam width | ° | H:360 / V:6 | H:360 / V:6 |
| Connector | type | N Female | N Female |
| Size | mm | 1200x24 | 580x20 |



PoE SWITCHES

SWP 5 / SWP 9 / SWP 26

| REFERENCE | SWP 5 |
|---------------------|---|
| Code | 334001 |
| PoE Power | 72 W |
| PoE Standard | IEEE 802.3, 802.3u, 802.3x, 802.3af, 802.3at |
| Ethernet Interface | 4 x 10 / 100 / 1000 Mbps puertos Ethernet 1 x 10 / 100 / 1000 Mbps puerto Ethernet Uplink 1 x 1000 puerto SFP Friba |
| Back bandwidth | 1 Gbps |
| MAC Address table | 2000 |
| Power Supply | DC48V / 1.5A |
| Working temperature | 0°C / 55°C |
| Size (L x W x H) | 185 mm x 96 mm x 24 mm |
| Power consumption | Max. 72 W |

| REFERENCE | SWP 9 |
|---------------------|---|
| Code | 334002 |
| PoE Power | 120 W |
| PoE Standard | IEEE 802.3, 802.3u, 802.3x, 802.3af, 802.3at |
| Ethernet Interface | 8 x 10 / 100 / 1000 Mbps puertos Ethernet 1 x 10 / 100 / 1000 Mbps puerto Ethernet Uplink 1 x 1000 puerto SFP Friba |
| Back bandwidth | 1.8 Gbps |
| MAC Address table | 2000 |
| Power Supply | DC48V / 1.5A |
| Working temperature | 0°C / 55°C |
| Size (L x W x H) | 250 mm x 122 mm x 35 mm |
| Power consumption | Max. 120 W |

| REFERENCE | SWP 26 |
|---------------------|--|
| Code | 334003 |
| PoE Power | 450 W |
| PoE Standard | IEEE 802.3, 802.3u, 802.3x, 802.3af, 802.3at |
| Ethernet Interface | 24 x 10 / 100 / 1000 Mbps puertos Ethernet 2 x 10 / 100 / 1000 Mbps puerto Ethernet Uplink 2 x 1000 puerto SFP Friba |
| Back bandwidth | 12.8 Gbps |
| MAC Address table | 8000 |
| Power Supply | 100 - 240 V |
| Working temperature | 0°C / 55°C |
| Size (L x W x H) | 440 mm x 284 mm x 44 mm |
| Power consumption | Max. 450 W |

- 4 / 8 / 24 high-speed ethernet ports 10 / 100 / 1000
- 2 - 4 uplink ports (Ethernet and SFP Fiber 1GB)
- PoE ports 48 Vdc
- Total power 72W / 120W / 450W
- Plug & Play



CONTROLLERS

Ek



CAP 1 / CAP 2

- Management and control up to 50 / 150 AP
- Real-time installation monitoring
- 4 high-speed ethernet ports 10 / 100 / 1000 Mbps



| REFERENCE | CAP 1 |
|---------------------|--|
| Code | 335001 |
| Hardware | |
| Ethernet Interface | 4 x 10 / 100 / 1000 Mbps Ethernet ports 1 x 10 / 100 / 1000 Mbps Ethernet Uplink port |
| Power Supply | DC 12V / 1.5A |
| Software | |
| Programming | Web interface |
| General | |
| Working temperature | -20°C / 45°C |
| Size (L x W x H) | 225 mm x 123 mm x 35 mm |
| Power consumption | Max. 5 W |

| REFERENCE | CAP 2 |
|---------------------|--|
| Code | 335002 |
| Hardware | |
| Ethernet Interface | 4 x 10 / 100 / 1000 Mbps Ethernet ports 1 x 10 / 100 / 1000 Mbps Ethernet Uplink port |
| Power Supply | 100 - 240 V |
| Software | |
| Programming | Web interface |
| General | |
| Working temperature | -20°C / 45°C |
| Size (L x W x H) | 294 mm x 180 mm x 44 mm |
| Power consumption | Max. 5 W |



| REFERENCE | | POE 24 |
|----------------------|-----|---------|
| Code | | 332001 |
| Nominal Voltage | V | 100/240 |
| Nominal Frequency | Hz | 50 - 60 |
| Input Current | A | 1 |
| Power Output Voltage | Vdc | 24 |

| REFERENCE | | POE 48 |
|----------------------|-----|-----------|
| Code | | 332002 |
| Nominal Voltage | Vac | 240 ± 10% |
| Nominal Frequency | Hz | 50 - 60 |
| Input Current | A | 2 |
| Inrush Current | A | 30 |
| AC Leakage Current | mA | 3.5 |
| Power Output Voltage | Vdc | 48 |

PoE INJECTORS

POE 24 / POE 48

- Injectors 10/100/1000 Mbps
- PoE 24 24 Vdc / 2 A
- PoE 48: 48 Vdc / 2 A



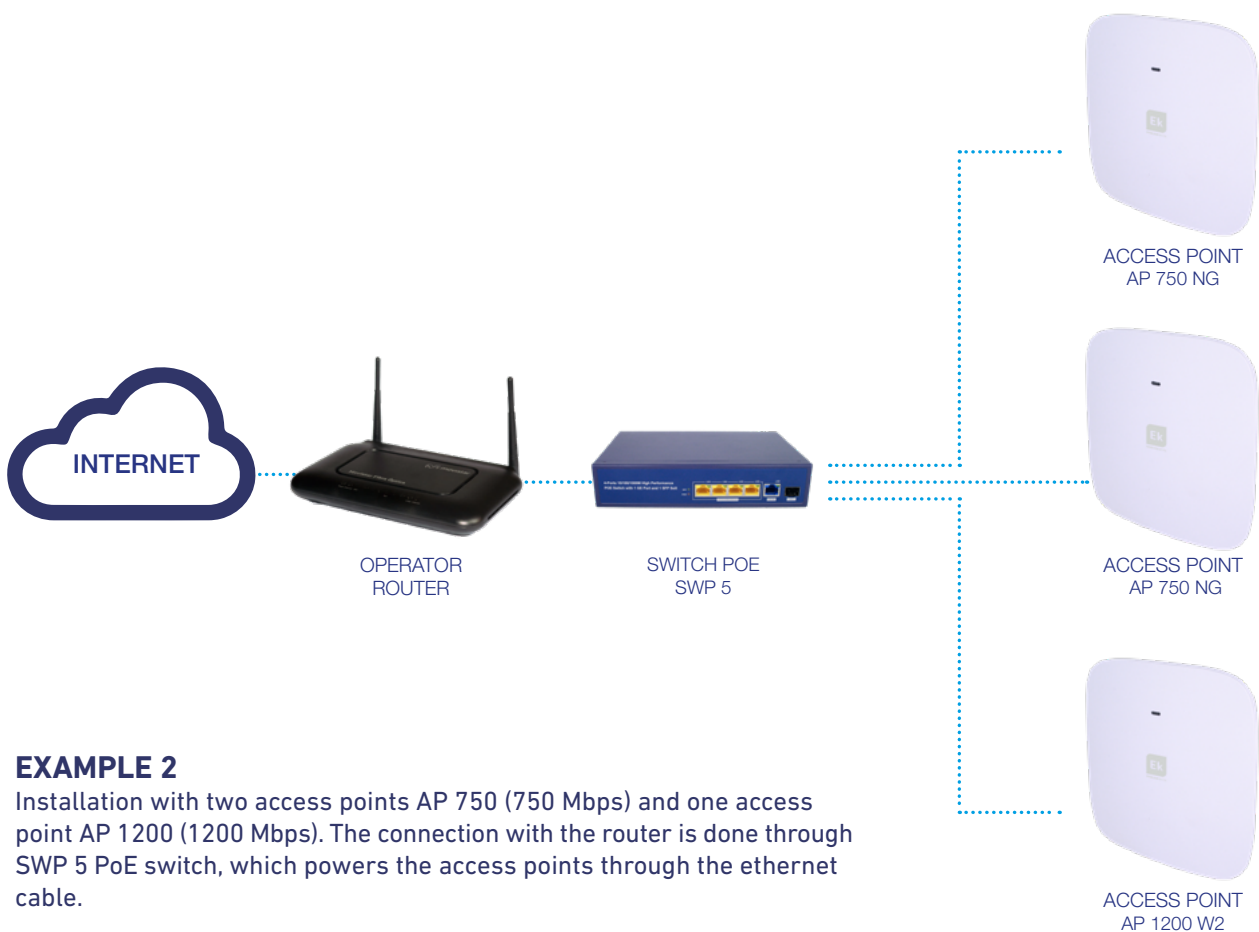


INSTALLATION EXAMPLES



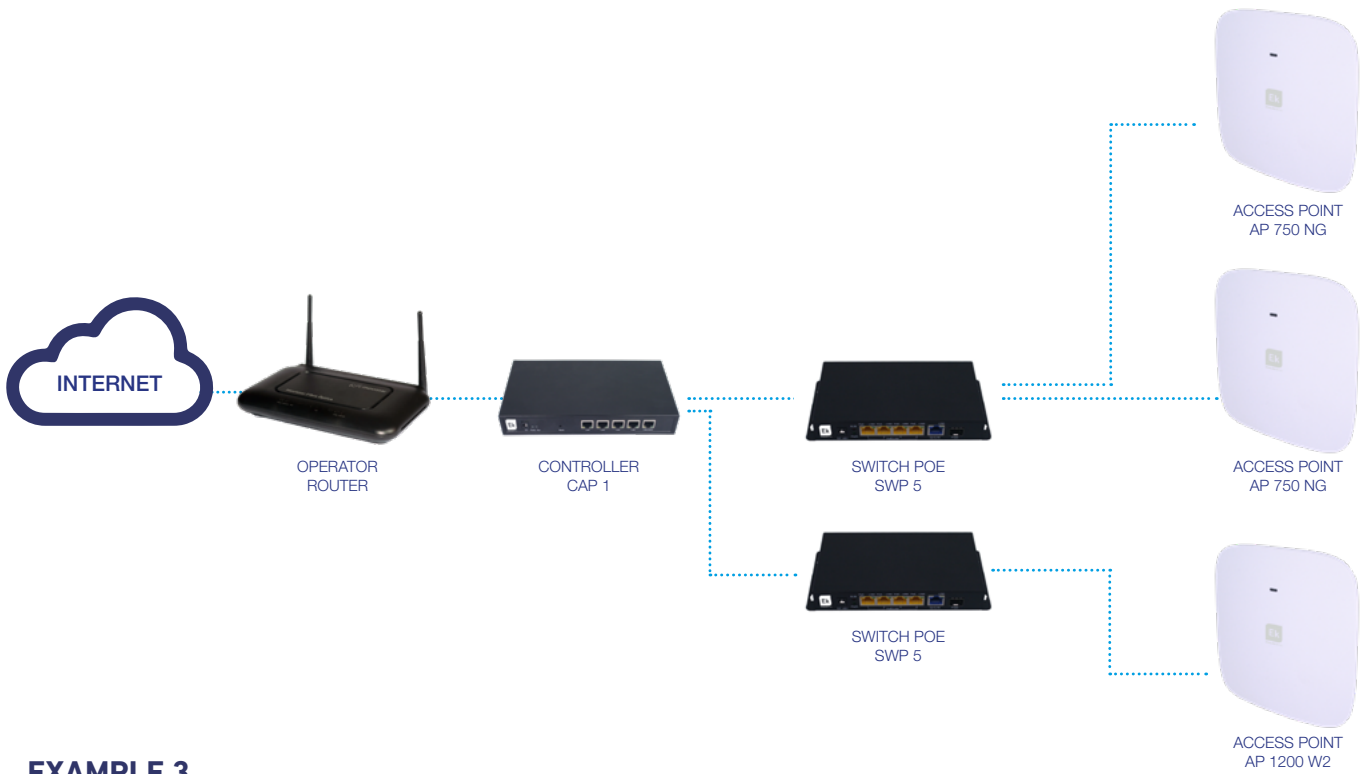
EXAMPLE 1

Basic installation of an access point AP 300 (300 Mbps) connected to the telco router. AP 300 is powered through PoE 24 injector, included in the packaging.



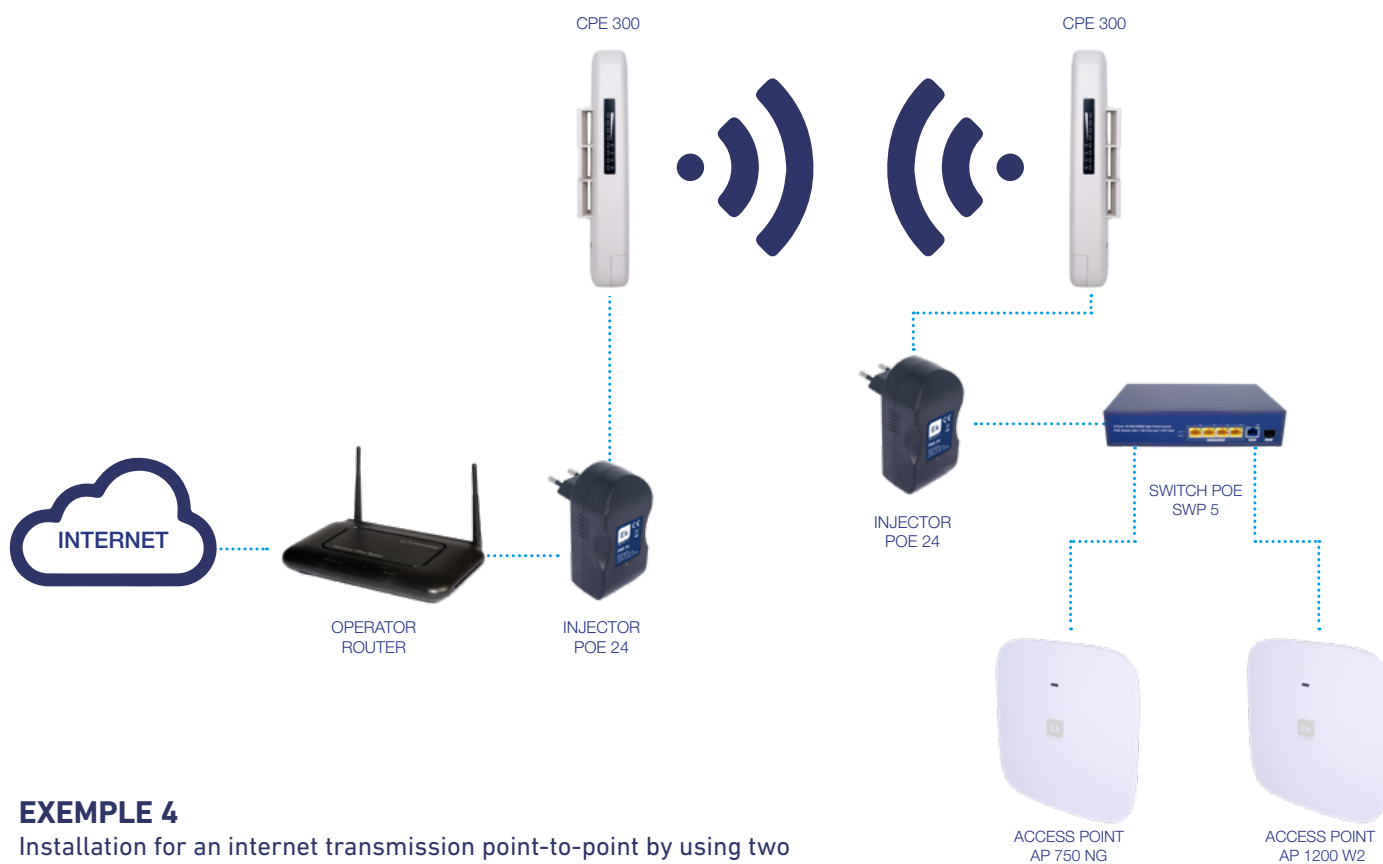
EXAMPLE 2

Installation with two access points AP 750 (750 Mbps) and one access point AP 1200 (1200 Mbps). The connection with the router is done through SWP 5 PoE switch, which powers the access points through the ethernet cable.



EXAMPLE 3

Installation similar to the example 2. It includes a second switch SWP 5 -i.e. for installation on the second floor- and a network controller CAP 1. It allows to set up the access points from a centralized location and define other additional network values -for exemple, bandwidth allocations for user-.



EXEMPLE 4

Installation for an internet transmission point-to-point by using two access points CPE 300 (300 Mbps 5 GHz). When internet signal is received at second location, it is sent to two access points AP 750 and AP 1200 through a PoE switch (SWP 5).



EKSELANS BY ITS

EKSELANS by ITS
ITS Partner O.B.S. S.L
Av. Corts Catalanes 9-11
08173 Sant Cugat del Vallès
Barcelona (España)
Tel: +34 93 583 95 43
info@ek.plus
www.ek.plus