

3G, Wi-Fi and Bluetooth
Sensor with integrated
Wireless Backhaul and GPS

P110 presenceSensor™

Unlocking the value
of location data

3G

Wi-Fi

BLE



Introducing the ip.access presenceSensor™

With the unique presenceSensor, ip.access has designed a device that can take operators into new territory for revenue generation and business models.

Fast and simple to deploy, the presenceSensors sit alongside the existing network without consuming valuable network connection resources, and with no need for complex network management and integration.

presenceSensors do not connect into the core network, but are designed to capture critical user information including location, dwell time, IMSI, IMEI and range, to support Big Data Analytics applications such as footfall analysis.

By combining precise in-building location with the mobile subscriber identity, presenceSensors open up the potential for real-time, targeted presence-based marketing by the network operator, including loyalty promotions.

“Always On” Location

Unlike location systems with only Wi-Fi or Bluetooth, which require users to turn on, opt-in and download an app, presenceSensors use the cellular network protocol to capture information from passing handsets - automatically, securely, and with no user intervention required.

The collected data can be enriched, anonymised and fed to other partners, unlocking valuable new revenue opportunities for the mobile operator.

Targeted, fine-grain indoor LBS

presenceSensors can be configured and optimally located to serve smaller, much more targeted areas than is possible using cellular Location Based Services (LBS). They can be configured to cover a particular area of a shop such as an entrance point, a promotions area, outdoor digital media or mobile point-of-sale.

Application examples

- Retail and public spaces
- Footfall tracking
- Dwell time measurement
- m-commerce
- Security & Fraud Protection
- Push SMS Vouchers
- Big Data Analytics



P110 presenceSensor

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The Who, Where and When of location

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presenceSensor coverage

Handset detection radius	Configurable, 2m - 50m depending on environment
Handset detection time	20 seconds (typical)
Data logging parameters	Timestamp, IMSI, IMEI, Range, Dwell Time

presenceSensor unit

Operating mode	3G UMTS/HSPA+
Max RF output Power	20mW (13dBm)
UMTS TX bands	1
Network Listen	2G & 3G, Bands 1/8
WiFi	802.11ac, 5GHz or 2.4GHz
Bluetooth	Classic (V1.x, V2.x) or Smart (Low-energy V4.x)
GPS	GPS/GNSS
Antennas	Internal
Security - User data	Secure Hashing, EU Data Privacy compliant
Security - Backhaul	TLS1.2 X509 certificate authentication with CRL
Interactive interface	White OLED display with four buttons
Audio Alert	Button beep Alarm on power interrupt
Built-in Backhaul options	Integrated Wireless Backhaul (WBH) - used by default Wired Ethernet (RJ45 Ethernet port, up to 1Gbps)

Handset compatibility

Air interface requirements	3G support (UMTS WCDMA)
Handset state	2G/3G/4G idle
Subscriber networks	presenceSensor operator's PLMN, international roaming, and supported MVNOs

Integrated Wireless Backhaul

Operating modes	3G UMTS/HSPA+ with GSM/GPRS/EDGE fallback
Max RF output Power	250 mW (UMTS) 2W (GSM 850/900) 1W (GSM 1800/900)
3G UMTS bands	1, 2, 5/6, 8, 19
GSM/GPRS/EDGE bands	850, 900, 1800, 1900
SIM card socket	Standard 2FF Mini-SIM

Environmental, Physical & Power

Dimensions	225.8 x 139.3 x 37.6 mm
Temp. Range	0° to 40°C
Operating humidity	10 to 70% non-condensing
Ingress protection	IP30
Mounting	Free standing, wall mounted or ceiling mounted
AC power adapter input	100-240V AC, 50/60 Hz
AC power adapter output	12V DC, 18W maximum
P110 power draw	16W maximum

presenceSystem

